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# The effect of positive attention, approval, and frugal incentives on the attendance of non-certified school employees in an urban school district

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**Chaplik, Barbara Dare North**

**THE EFFECT OF POSITIVE ATTENTION, APPROVAL, AND FRUGAL  
INCENTIVES ON THE ATTENDANCE OF NON-CERTIFICATED SCHOOL  
EMPLOYEES IN AN URBAN SCHOOL DISTRICT**

*Iowa State University*

**Ph.D. 1981**

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The effect of positive attention, approval,  
and frugal incentives on the attendance of  
non-certificated school employees in  
an urban school district

by

Barbara Dare North Chaplik

A Dissertation Submitted to the  
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## TABLE OF CONTENTS

	<u>page</u>
INTRODUCTION	1
REVIEW OF LITERATURE	5
SUMMARY	39
SECTION I	41
SECTION II	55
SECTION III	70
DISCUSSION	90
BIBLIOGRAPHY	94
ACKNOWLEDGEMENTS	106
APPENDIX A	109
APPENDIX B	126

## INTRODUCTION

At a time when the economy is tight and all excesses must be examined, it is an appropriate task to attempt to reduce all unnecessary cost in the public sector. Management can no longer assume that labor costs must include sufficient padding to ensure that production will be stable. Instead, management must learn and exercise techniques to enable the most economical and efficient means of production. With ever-increasing inflation and strong union demands for higher wages, one must examine all possible savings within the system. One source of cost savings is the reduction of worker absenteeism. In recent years, more industries and public agencies have spent large sums of money to buy back unused sick leave or allow unused sick leave to supplement their workers' vacation periods. The major savings in these programs has been the reduction of unscheduled absences in favor of increased scheduled leaves for workers. Clearly, the greater concern of management is the unscheduled leave which disrupts the smooth efficiency of operation. Another way of ensuring sufficient workers for the job is to overhire with the result of inflating the payroll and boosting training costs. Canfield and Soash (1955) said that overhiring may stimulate turnovers as workers feel insecure about their employment.

A study of absenteeism of an entire school district's employees was conducted during the 1978-79 school year and was the impetus for the present study of a small section of that school district in an attempt to stem the tide of absences.

The present study was an attempt to use the techniques of attention, approval, and frugal incentives to reduce the frequency of absences.

#### Explanation of the Dissertation Format

The dissertation format used in the presentation of the research was approved by the Graduate Faculty at Iowa State University. This format was intended to present research in manuscript form suitable for publication in professional journals.

The divisions by chapters were similar to that of traditional dissertation style: introduction, review of literature, and discussion. The methods and procedures and the results sections were represented by the three sections which made up the journal manuscripts. The hypotheses being tested in the entire study were placed in Appendix A as were the results which were not incorporated in a manuscript. In the main, these additional results indicate this population was not unlike others in previous studies. While these findings may have been of general interest, they were not of suffi-

cient stature to provide new insights or contradictory substance to the field of absenteeism.

The choice of the three manuscripts from the entire collection was made by the investigator as each contributed new or useful information in this area.

Section I compared absenteeism by worker classification or work period. It described the part-time, single shift; part-time, split shift; and full-time workers in a comparison of work absence rates and rates of absence frequency. This manuscript is intended for a professional journal, such as Personnel Psychology, Occupational Psychology or Human Relations.

Section II reports a study of non-monetary incentives used as techniques to reduce absenteeism. It was written for a more general professional journal in applied psychology or human management, such as The Journal of Human Behavior and Management, Journal of General Psychology or Journal of Applied Psychology.

Section III describes an attempt to measure the effect of incentives on a portion of a worker population with a higher proportion of absence frequencies than the general work force. This manuscript is intended for a personnel or management journal, such as Journal of Applied Behavioral Analysis, Personnel Psychology or Organizational Behavior and Human Performance.



The final chapter, or discussion section of this dissertation attempts to relate all three manuscripts to each other as well as to the broader study of absenteeism. Additional tables and findings related to the general hypotheses are located in Appendix A. Appendix B is composed of materials pertinent to the setting and the organizational framework within which this research was conducted.

## REVIEW OF LITERATURE

## Historical Perspectives

World War II

Absenteeism in the work place began to attract serious attention during the war years (1942-1945). Several efforts were made in the United States and England to study this problem as munitions plants were of paramount importance in the war effort (U. S. Department of Labor, 1943; Absence from work: Prevention of fatigue, 1943; Absenteeism. Hearing before the Committee on Labor, 1943; Fox and Scott, 1944; Fox and Scott, 1949; Mayo and Lombard, 1944).

Attention was focused in government publications upon the problems of the labor force discussing such issues as transportation, housing, nutrition, and health in an attempt to find solutions for absences from the workplace. There were frustrations for the workers with shortages in housing, daycare, and transportation as well as the rationing of gas, meat, and all materials which had a use in equipping and arming the military. The war plants were trying to operate six-day weeks with more than one shift. Plant conditions were crowded because of the great expansion of many industries to serve the demands of a country at war. The work force was made up of women, many of whom had not previ-

ously been employed outside the home, and marginally employable males who were not acceptable to the military by virtue of age or infirmity.

In addition to the aforementioned problems associated with the work force, there were longer distances to travel to jobs, poor working conditions, indifference of the men about to be inducted into the service, and a need to find time to shop, bank, and take care of living needs. The U. S. Department of Labor (1943) suggested that a three and one-half per cent rate was the normal expected absence figure and five per cent was too high. There were industries reporting absence rates as high as 20 per cent. The Industrial Health Research Board (Absence from work: prevention of fatigue, 1943) in England felt that a peacetime absence rate of five per cent was normal; however, the wartime rate was between five and ten per cent for men and eight to twenty per cent for women with married women having the highest absence rates. As a result of this concern, a study was undertaken by the U.S. Department of Labor, Division of Labor Standards (1943) entitled, "Controlling Absences". Data collected from contributing companies such as Sunoco, duPont, Revere Copper and Brass, General Motors, etc. indicated that illness accounted for 46 to 73 per cent of all absences.

In the study mentioned above by the U. S. Government, some of the large companies reported the use of incentives

and other techniques to control absenteeism. Among the efforts reported were award pins with a military insignia for excellent attendance. Other techniques employed included charts, graphs, lists of "good" workers all published in the house organ, and interdepartmental competitions with trophies and special recognition awards (Pickard, 1945). Training foremen to counsel workers seemed to make a difference. Gaining union support for the reduction of absence was very important as well as the requirement that workers report to the supervisor when they return to work. Efforts to maintain better health and conditions which would promote better attendance included serving hot meals, providing lounge areas and child care facilities, and granting days off to allow for business and shopping needs. Many organizations provided health care and first aid as well as employee counseling (U. S. Department of Labor, Division of Labor Standards, 1943) aimed at keeping workers on the job and avoiding long and costly illnesses.

Exploiting the patriotism theme of the times, several industries ridiculed or humiliated their absence-prone employees by paying for days absent with "Axis dollars", posting the names of the workers with high absence rates, and suggesting that if the defense workers were absent, they were helping the enemy (Mayo, 1945). In fact, the workers with higher pay than that to which they were accustomed were

thought to reward themselves with vacation and absent themselves out of a feeling of unexpected prosperity

(Absenteeism. Hearing before the Committee on Labor, 1943).

Other industries took a more positive view toward controlling absenteeism and attempted to see that workers received some weekday time off on a rotating basis, recognized workers for good attendance, attempted to organize transportation systems, and relieved bored assembly line workers with music and work breaks.

Management techniques, morale of the workers, ability of foremen in their supervisory roles, and group work norms seemed to influence absence rates (Fox and Scott, 1944; Fox and Scott, 1949; Mayo and Lombard, 1944). These researchers found that the size of the work group, group incentives, and effective management policies and practices were better predictors of absence than individual worker traits. There seemed to be general agreement that if workers were well oriented to the job, which included a presentation of how the job that they did fit into the general product and its usefulness in the war, then motivation was increased (Mayo, 1945). In general, it can be said that the war years were important to the study of industrial absences in that the need to control problems with a shrinking worker pool and a different work force made it necessary to study effective management procedures in this area.

### Personal Characteristics of the Workers

In the past, efforts have been made to establish relationships between worker characteristics and absenteeism. These characteristics are variables over which the employer has no control except as they are represented in recruitment and hiring.

#### Sex

General agreement was reached in those studies which compare male and female workers that females were absent more often (Freedman, 1967; Hedges, 1973; Campbell, 1970; Behrend, 1959; Kerr et al., 1951; Redmond, 1978; Porter and Steers, 1973; Covner, 1950; Canfield and Soash, 1955; Chadwick-Jones et al., 1973; Stockford, 1944). This finding was also related to family size which indicated that the size of the family was correlated negatively with absenteeism of males and positively with females (Porter and Steers, 1973; Naylor and Vincent, 1959).

In support of women, Behrend (1959) found that jobs held by women were of lower status. This contention as a correlate of absence was given credence by her study of women teachers who had no unscheduled absences and one by Simpson (1962) who found no differences in absences between male and female teachers. This conclusion was not shared by two other

studies regarding teachers, Freedman (1967) and Redmond (1978). Covner (1950) in finding greater absences among women felt that women were generally found in larger work groups, and that the size of the group might confound results based on gender alone. Hedges (1973) noticed a greater proportion of women in "new-hire" and low paid jobs both of which are associated with high absence rates. Isambert-Jamati (1960) concluded in her study of women employees in eight industrial settings in Paris that female absenteeism is higher than male but varies by age peaking between 25 and 39 years of age, relating to maternity leave and young children in the home. After this peak period, up to age 60 the same trend is observed for both men and women.

#### Age and tenure

Age as a variable in absenteeism studies has been rather common (Campbell, 1970; Jackson, 1944; Cooper and Payne, 1965; de la Mare and Sergeant, 1961; Douglas, 1976; Edwards, 1979; Covner, 1950; Hedges, 1973; Liddell, 1954; Redmond, 1978). In some investigations tenure, a similar construct, was used rather than age of employees (Waters and Roach, 1971; Baumgartel and Sobol, 1959; Freedman, 1967). A major reason for the inclusion of age or tenure in examining absenteeism is perhaps the availability of the information and the attempts to dispel myths concerning the frailty of

older workers and irresponsibility of youth.

In longitudinal studies, Cooper and Payne (1965) and de la Mare and Sergean (1961) found no decrease in the frequency of absences as the workers in the companies studied aged, suggesting that cross sectional investigations may reflect differing "absence cultures" in the various age groups. Both Cooper and Payne (1965) and Jackson (1944) observed that non-certifiable (unpaid) absences were higher among younger workers; however, that may mean simply that certifiable (paid) leave time accumulates with length of tenure. De la Mare and Sergean (1961) in a cross sectional study correlated high frequency of absence with the youngest age group (16-25); however, nearly as much absence was found in the older age group (46-59). When only sick leave was measured, no age relationship with absence frequency appeared. Length of absence was strongly associated with older workers. Hedges (1973), comparing part and full-week absences, noted that younger workers had more part-week absences.

Liddell (1954) studying coal miners; Martin (1971), with an engineering factory; Hill and Trist (1955), iron and steel workers, all found younger workers having more absenteeism than older workers. Naylor and Vincent (1959) in their study of female clerical workers and Redmond (1978) in his study of teachers found no age-absence relationships in their investigations. Baumgartel and Sobol (1959) and Waters and Roach



(1971) found significant negative correlations between age and absenteeism when studying female employees in airlines and insurance companies. Jackson (1944), Douglas (1976), and Carphell (1970) found absenteeism to increase with age when they considered factory workers, government employees, and teachers respectively.

The variety of conclusions leads one to speculate that the measurement technique used may be the key to understanding the results of these studies. Frequency of absence is a more sensitive measure in describing absenteeism as days absent may emphasize long absences or disability leaves.

### Job satisfaction

A great many studies have attempted to correlate job satisfaction/dissatisfaction with absenteeism (Cheloha and Farr, 1980; Dittrich and Carrell, 1979; Hackman and Lawler, 1971; Johns, 1978a; Kerr et al., 1951; Metzner and Mann, 1953; Smith, 1977; Waters and Roach, 1973; Weaver, 1980; Lawler, 1974; Mann and Sparling, 1956; Bass, 1965; Brayfield and Crockett, 1955; Porter and Steers, 1973; Freedman, 1967; Newman, 1974). Several of these have found an inverse correlation between job or work satisfaction and absenteeism (Hackman and Lawler, 1971; Cheloha and Farr, 1980; Johns, 1978b; Metzner and Mann, 1953; Smith, 1977; Szilagyi, 1980; Waters and Roach, 1973; Weaver, 1980; Lawler, 1974; Bass,

1965; Porter and Steers, 1973; Hrebiniak and Roteman, 1973).

In contrast, Pascale (1978) found no difference in absence patterns between Japanese and American-managed companies although the workers in the Japanese-managed companies expressed greater job satisfaction. Nicholson et al. (1976) reviewed 29 studies and found no correlation between job satisfaction and absence. Freedman, (1967) found no correlation when he studied absenteeism among teachers. Dittrich and Carrell (1979) in a longitudinal study found employee perceptions of equitable treatment a stronger predictor of absence and turnover behavior than job satisfaction. Kerr et al. (1951) discovered a positive correlation between job satisfaction and absenteeism. Hulin and Blood (1969) commented that while job enlargement was thought to increase job satisfaction, it appeared the opposite was true for some workers who were satisfied with repetitive tasks. Mann and Sparling (1956) related absences and attitudes for men only in low skill employment and tied satisfaction to greater opportunity for meeting and planning with management. Porter and Steers (1973) found turnover related to job dissatisfaction but not absenteeism. A study of university students by Baum and Youngblood (1975) found that a compulsory attendance policy improved class performance without altering the level of satisfaction.

Lundquist (1958), Metzner and Mann (1953) and Johns (1978a) found that frequency of absence was a more sensitive criterion than time lost. Hrebiniak and Roteman (1973) discovered a positive correlation between absenteeism and need deficiency. Cheloha and Farr (1980) found both job involvement and satisfaction inversely related to absenteeism, but job involvement more strongly related to absenteeism when the other factors included in the larger category of job satisfaction were partialled out.

Isambert-Jamati (1960) noted that when women's absences were compared to measures of job satisfaction, the lack of relationship was interpreted to mean that the work outside the home held little value for women. She suggested that since job status is usually lower for women, the rewards are different than for men. Behrend (1959) found no unscheduled absences among a group of women teachers which may indicate higher status jobs with greater responsibility tend to curb absenteeism as job satisfaction is more likely to occur.

#### Working Conditions

Conditions on the job are often suspected as causing high absence rates. Except for extremely heavy work (Mayo and Lombard, 1944), the physical demands of the job gave no support to a relationship with absences. Elton Mayo (1945) found that first-line managers in iron casting shops, sheet

metal mills, and a manufacturing department varied as much in the way they treated their people as did the absence rates of the workers. Mayo believed that when first-line supervisors were concerned with the human aspects of their workers, and when management recognized and allowed sufficient time for this function, the company benefited by lower absence rates. The data which produced this tenet were that of Fox and Scott (1943) and again in Mayo and Lombard (1944) in the aircraft industry.

The concept of leadership effect, which pervaded a work group and then the teams, related to the consideration and ability of the line manager according to Mayo (1945). Mayo and Lombard (1944) examined these work groups and compared them to families with the first-line supervisor's role being similar to that of the parent who teaches by example the acceptable norms of the family group and acts as an interpreter for the children in defining the community standards as well. The supervisor sets the work standards and serves as a buffer between the worker and the formal organization.

Other researchers found that individual absence was related to the absence norms established by a fairly small group of veterans working together (Porter and Steers, 1973; Campbell, 1970; Gadourek, 1965; Mann and Sparling, 1956; Cooper and Payne, 1965). In other words, work groups seemed to show conformity in the absence behaviors of the team mem-

bers.

Leadership style has yielded generally favorable results in studies which related absences to leader characteristics. Those leaders who were either perceived to be caring and approachable by the workers or those who scored high in "consideration" on instruments measuring leadership style were associated with lower absence rates among their workers (Kunze and Branner, 1944; Covner, 1950; Metzner and Mann, 1953; Argyle et al., 1958; Patchen, 1960; Bass, 1965; Knight, 1973; Knowles, 1979). Pascale (1978) in comparing production and absences in Japanese and American-managed companies in the U.S. found no difference in absence rates, although the workers felt that they were treated with greater consideration in the Japanese-managed companies. Johns (1978b) found absence to be unrelated to organizational structure and negatively but inconsistently related to consideration of the supervisor. Attitudes of the workers is summed up in this statement:

"Our general assumption was that if the totality of satisfactions that an employee obtains from the different aspects of his work situation were not enough to cause him to be willing to invest the extra energy occasionally required to get to the job, the employee would be absent from work" (Metzner and Mann, 1953, p. 483).

### Withdrawal

One of the most lively controversies has come about in the literature regarding absenteeism and turnover. Herzberg et al. (1957) stated the two conditions like this:

"The problems of turnover and absenteeism may be discussed together since in some respects the small decision which is taken when the worker absents himself is a miniature version of the important decision he makes when he quits his job" (p. 103).

Melbin (1961) agreed in his statement:

"In light of these findings, high absenteeism (lateness and absence) appears to be an earlier sign, and turnover (quitting and being fired) the dying stage of a long and lively process of leaving" (p. 15).

Crowther (1957) found absence and turnover occurring similarly under certain market conditions. He found that as unemployment decreases, absence and turnover increase and the inverse. Waters and Roach (1971), Beehr and Gupta (1978), Burke and Wilcox (1972), Waters and Roach (1973) supported a significant relationship between absence and turnover, at least to the extent that "leavers" had more absence prior to leaving than "stayers". Lawler (1974) found satisfaction related to both turnover and absence, the leavers having a greater degree of dissatisfaction than the stayers.

Hill and Trist (1955) described absenteeism as a "stayer" phenomenon and said it provides a temporary withdrawal from the stress of continuing in the work relationship. Lyons (1972), in a review of literature, found little support for the common correlate notion. Porter and Steers (1973) found in reviewing studies that there was a greater relationship between turnover and low satisfaction, but absenteeism was more related to the individual's closeness to the organization. Only six of 22 factors tested showed significant relationships in the same direction for both absenteeism and turnover. Steers and Rhodes (1978) and Williams et al. (1979) argued against absenteeism and attendance having common roots.

Muchinsky (1977) contended that absenteeism is not clearly defined, and the wide range of correlates associated with absenteeism clouds the issue. Gupta and Beehr (1979) felt that both absenteeism and turnover were reactions to stress and were used as avoidance mechanisms. Castle (1956) reached beyond the absenteeism and turnover symptoms of withdrawal and included accidents in the same category. Edwards (1979) tested the Nicholson et al. (1976) theory of attachment in an attempt to discover if "stayers" and "leavers" have differences in attachment by studying absence behavior. He found a positive relationship between frequency of absence but not in severity (or total days lost) among

those who leave after only a short period in the work force. He has contended that "leavers" use both absenteeism and turnover to disengage from the job otherwise "stayers" would show more absences than "leavers" if they were both simply means of withdrawing.

Palmer et al. (1944) used interviews after the employees had terminated to find reasons for their leaving Lockheed. There were sex differences, and the reasons were ranked in the following order: men left because of health, another job, dissatisfaction with placement, general dissatisfaction, wages, and transportation. Women left because of health, child care, other domestic problems, work being too heavy, placement problems, and transportation. Palmer et al. found that wages were most important to the middle-age group, and health was the reason given most often by older ex-employees.

Miner (1977) found absences greater and turnovers generally lower during the winter. She found in reports from the Bureau of National Affairs that turnover rates are lower in larger companies, but absence rates are higher when compared to smaller companies. The question of whether absence and turnover share common roots is still unanswered.

#### Worker Classification

Status or perceived status is sometimes reflected in the attitudes of importance that one holds toward one's



employment. Hourly pay or salary is usually an indication of job status and greater responsibility. Very few studies examined managerial or white collar workers and their absenteeism rates. An exception is a study by Baumgartel and Sobol (1959) which compared non-supervisory personnel in a major airline over a period of one year. The employers classified as blue collar workers with long service were absent less than white collar workers of equal service length. Using the measure of absence frequency, Baumgartel and Sobol (1959) found that for blue collar workers there was a stronger correlation with reduced absenteeism as wages, responsibility and independence increased. Mann and Sparling (1956) found high absences and negative work attitude correlated only for men in low skill employment.

Chadwick-Jones et al. (1973) in their review of the literature found general agreement that the higher the skill and occupational category the lower the absence rates. A conflicting viewpoint regarding responsibility was reported by Warr and Wall (1975) as increasing employee responsibilities for aircraft production did not result in lowered absence. Hulin and Blood (1969) found that job enlargement did not lower absenteeism and concluded that some workers preferred repetitive tasks.

### Economic Effects on Absenteeism and Turnover

Crowther (1957) looked at 10 factories and 18 populations and found absences and turnovers following trends related to economic conditions. In general, he found there was less turnover when population size in the work place was lower and more turnover as hiring increased. Crowther found both absence and turnover decreased when unemployment rose and the reverse took place when the job market improved. Economic conditions produced a consistent effect on absenteeism according to Knowles (1979); thus, he felt differences in work absences among work groups were produced by organizational problems. Hedges (1973) found opposite rates for absenteeism and turnover as unemployment changed. Absenteeism was higher when less jobs were available and turnover was down, which led her to theorize that workers who would have left compensated by using unscheduled absence.

### Leadership Style and Perceptions of Equality

"Supervisors with best records of performance focus their primary attention on the human aspects of their subordinates problems and on endeavoring to build effective work groups with high performance goals" (Likert, 1961, p. 7).

Mann and Baumgartel (as reported by Likert, 1961) found that supervisors who make their workers feel free to discuss their job problems have less absence among their workers than

those who do not feel free to do so. Metzner and Mann (1953), Bass (1965), Argyle et al. (1958) and Fox and Scott (1943) all favored democratic leadership high in "consideration", which engenders positive feelings of the workers toward the supervisor as a factor in lowering absences.

Mann and Sparling (1956) used interlocking organizational meetings to improve communication and found improvement in attendance through this change in leadership. Differences between low and high absence plants showed up in perceptions of fairness in the handling of absences by the supervisors among other factors. Fair and equitable treatment was a significant factor related to lower absence in studies by Patchen (1960), Dittrich and Carrell (1979) and Kearns (1970). Johns (1978a) said that when satisfaction was compared with personal, leadership, or job factors it did not account for a significant amount of additional variance. Likert (1961) supports this contention thus:

"Supervision and the general style of leadership throughout the organization are usually much more important in influencing results than such general factors as attitudes toward the company and interest in the job itself." (p. 25)

"Leader reward behavior" is a phrase used by Crosby (1980) to describe positive and supportive leadership style. They feel this to be correlated with lowered absence on the part of the employees as contrasted with punitive leadership

which has negative effects.

In his study of teacher absenteeism, Freedman (1967) reported an inverse correlation of junior high teacher absence with consideration by principals, but no relationship between absence and initiating structure of the principal.

In an exhaustive study using rotated factor matrices, Gadourek (1965) found the personality of the foremen and the informal leadership of the group made differences in the feeling of well-being and absence rates of workers. Chadwick-Jones et al. (1973) in their review of absence literature stated that the evidence confirms that supervision and supervisory style are related to absence secondarily, relative to employee adjustment and primarily through recording, control, and discipline. Muchinsky (1977) in his review of literature, pointed out that in Waters and Roach (1971), Waters and Roach (1973), Hrebiniak and Roteman (1973) and Newman (1974) there was no significant correlation between satisfaction with supervision and absenteeism. This points out that satisfaction is a general concept rather than a specific leadership style or behavior.

Kunze and Branner (1944) felt it was the human contact through which the workers experience achievement, frustration, identification, disassociation, enjoyment, or distaste; and this human contact with the supervisor will need to make the attraction for going to work stronger than the hindrance

involved by that decision. Ronan et al. (1973) agreed with Patchen (1960) that the closeness of supervision is not the factor that influences worker absenteeism, but rather the behavior of the supervisor when she/he sets the standards.

Knight (1973) emphasized the importance of the foreman when he related that a difference between two and 17 per cent absenteeism in an electric company was due to the foreman in charge in the departments rather than to the type of work.

#### Affiliation, Attachment and Attractiveness

These descriptors of the relationship between the employee and the organization appeared to have some bearing on the attendance or absence behavior of the individual or the group (As, 1962; Fox and Scott, 1943), Kunze and Branner (1944), Mann and Sparling (1956), and more recently, Hackman and Lawler (1971) and Knowles (1979) felt that the organization by its structure, policy, and treatment of employees provides the climate in which positive attitudes can exist. Bass (1960) in describing attractiveness pointed to a management and group value:

"A group's attractiveness may be measured overtly by observing the proportion of members who remain rather than quit during a given period of time; by the duration of membership; by the frequency and strength of applications for membership in the group; by the lack of absenteeism; by the lack of requests for transfer or removal from the group; by the proportion of time and energy members invest in

the group; by the tendency to respond to requests for assistance; and by the tendency to support the group financially" (p. 62).

Other investigators (Edwards, 1979; Nicholson, 1977; Steers and Rhodes, 1978; Porter and Steers, 1973) found affiliation to be more of an individual matter. A model has been described by Nicholson (1977) which employs a valence system to predict the individual's decision to be absent from work. Affiliation seems rather consistently enhanced by the smallness of the group when absenteeism is the measure of relationship (Argyle et al., 1958; Buzzard, 1954; Baumgartel and Sobol, 1959; Covner, 1950; Ingham, 1970; Liddell, 1954; Mayo, 1945; Porter and Steers, 1973; Winkler, 1980; Walker, 1947). Argyle found the ideal group size from 20 - 30 as a facilitator of reduced absenteeism. Buzzard qualified the effect of group size, because the higher the skill level the smaller the work group in general.

Nicholson et al. (1976) cautioned that attachment may be a better term for attendance motivation than satisfaction, as it is possible for employees to have strong job attachment and yet find little satisfaction in the job itself or vice versa.

The concept of belongingness in the work group was emphasized by Fox and Scott (1944) and Gadourek (1965) in their findings of group norms related to absenteeism. Campbell (1970) in his study of government employees discov-

ered that departmental levels of absence rates were maintained over long periods of time. These rates of absences, regardless of whether they were high or low, were still resistant to change.

### Cost of Absenteeism

Behrend (1959) found a great deal of apathy among managers in regard to absenteeism even though the voluntary absence rate was ten times that of the strike rate in Great Britain. She found that most managers felt absence was low when the reverse was true.

Kearns (1970) said a one per cent rise in absenteeism would cost a company with 1,000 employees \$150,000 a year. In 1960, Plummer figured that sickness absence alone cost ten billion dollars to industry in 1958. Alcoholism was described by Bass (1965) as a 'billion-dollar hangover' for industry and said twice as many man hours of work are lost due to mental illness as to the common cold and all other respiratory diseases. Reducing absences by one per cent would result in savings of several million dollars annually for some companies according to Jeswald (1974).

Plummer and Hinkle (1955) blamed compensation plans for reducing the incentive to go to work. Of the 75,000 New York Telephone Company employees, 3,000 were absent per day on the average. They felt the problem was not one of serious

illness but "in and out" repeaters.

Allen and Higgins (1979) said we live in a absenteeism culture, and that taking a day off and calling in sick is supported by our culture. "Absenteeism is so routine that employers budget around it, make overtime allowances for it, and hire more workers than they need to take up the slack it causes" (p. 30).

Crosby (1980) reported from the Peat, Marwick, and Mitchell study of the mass transit system in Pittsburgh that 27 cents of every dollar contributed toward the operating subsidies of the nation's mass transit operation goes to unscheduled absences of the operators. In 1980 Crosby said:

"The taxpayers paid \$187 million so that 105,000 transit operators could take an average of 20 days a year off because of sickness or on-the-job injury. An additional nine day a year are missed by the average operator for jury duty, funerals, union business, specially requested days off, or AWOL" (p. 10).

Hawk (1976) reported that the cost of recruiting, hiring and training an employee varies from about \$1,000 for non-managerial personnel and more than \$14,000 for a manager. If a company loses ten per cent of its non-managerial people a year, the turnover expense would be in excess of \$100,000.

Kuzmits (1979) suggested and supplied a computation form to estimate costs of absenteeism. He said, "While many organizations regularly compute time lost to absenteeism



(hours, days, etc.) by employee and department, few organizations translate the collective act of staying away from work into economic terms" (p. 33).

### Measurement of Absence

The literature on absence is both confusing and confounding in that descriptions and measurement of absence are poorly defined. Some authors exclude certain absences (business, funeral, bereavement, vacations, emergency), and others fail to account for partial-days absent or tardiness. Two systems have generally been agreed upon in theory: absence rate and frequency rate. Within each of these the classification of types of absence is only germane to the study or the author, so caution must be exercised in generalizing from the results.

Work absence rate is computed by dividing the number of work days missed by the average number of employees times the number of work days in the period (week, month, or year) and then multiplying that ratio times 100. This method is used by the U. S. Department of Labor and many investigators (Hedges, 1973; Miner, 1977; Knowles, 1979; Mann and Sparling, 1956; Kearns, 1970; Baumgartel and Sobol, 1959; Buzzard, 1954; Campbell, 1970; Canfield and Soash, 1955; Pedalino and Gamboa, 1974; Kempen and Hall, 1977; Leahy et al., 1979; Kuzmits, 1979; Szilagyi, 1980; de la Mare and Sergean, 1961;

Covner, 1950; Martin, 1971; Hill and Trist, 1955; Plummer, 1960; Mayo, 1945). It is apparent that this measure can be heavily weighted by long-term illness and vacation periods, if there is no limit in the length of time they are carried along in this measurement ratio.

On the other hand, rates of absence frequency (number of absence periods) have been used by many investigators (Freedman, 1967; Isambert-Jamati, 1960; Johns, 1978a; Morgan and Herman, 1976; Behrend, 1959; Reid et al., 1978; Gadourek, 1965; Patchen, 1960; Waters and Roach, 1979; Gupta and Beehr, 1979). Both Chadwick-Jones et al. (1973) and Muchinsky (1977) have pointed out that absence frequency would be the more sensitive measure when absenteeism or empirical studies are considered. Muchinsky (1977) in his review of the literature relating to employee absenteeism found the best reliability and consistency in the use of the frequency index. Huse and Taylor (1962) found only frequency and one-day absences to have sufficient reliability to be used as criterion measures.

An interesting contribution by Latham and Pursell (1975) suggested abandoning measures of absenteeism in favor of using a measure of attendance. In their study they found test-retest reliabilities from .92 - .96 using their measure of attendance compared with .41 - .61 for absences. Steers and Rhodes (1978) also preferred an attendance model for the

study of worker behavior. Smulders (1980) argued that using attendance measures when the concern is for causes and control of absenteeism is overly simplistic, as it ignores the variables related to illness and long-term illness especially. Perhaps, to glean as much information from the data, multi-measurements should be applied and results should be more clearly related to the differences in the parameters of the measurement used.

Garrison and Muchinsky (1977) found a majority of absences were caused by a small percentage of workers, but the core changed from period to period. Paid and unpaid absences were used as criteria in their study.

Behrend (1959) noted that Monday absence rates were higher than those reported for Friday. She postulated that deficiency rates such as Monday absences subtracted from Friday absences would probably determine voluntary absence rate; this she called her Blue Monday Index. Argyle et al. (1958) used "worst day" as the basis for his study by subtracting the lowest absence day of the week from the highest day of the week for a voluntary absence rate. The theory of these approaches for absence measurement was that employee illness should be equally probable for each day of the week, and that heavy illness on a consistent day would signal employee abuse of sick leave.

## Control of Absence Behavior

### Policy

One of the difficulties in studying absences is that the rules both for recording absences and the policies governing the consequences of absenteeism are quite situationally specific. It is suspected that long-term absences are counted in some industries and not in others, or perhaps, terminations creep into absenteeism records inadvertently. The Bureau of National Affairs in 1973 made an all-out effort to collect and distribute in a systematic way absence data from a variety of sources and geographic areas. This service has been widely accepted by industry in recent years (Miner, 1977; Hedges, 1973).

Policies that spell out expectations of the organization and consequences of absenteeism as well as keeping good records are supported by Baum (1978), Kearns (1970), Leahy et al. (1979), Campbell (1952), Mann and Sparling (1956). Goal-setting was found useful in reducing absenteeism by Mann and Sparling (1956). Winkler (1980) in comparing teacher sick-leave policy found that requiring proof of illness reduced Monday and Fridays absences, and requiring teachers to call in sick directly to the principal reduced short-term absences. Allowing sick leave to carry over from one year to

the next is generally considered attendance-facilitating policy (Winkler, 1980).

Better communication was found effective in reducing absences (Mann and Sparling, 1956) when interlocking departmental meetings were implemented. Immediate follow-up by telegram and personal call reduced absenteeism by 78 per cent according to R. G. Ryan, Revere Copper and Brass, Incorporated (reported in Controlling Absenteeism: a record of war plant experience, 1943).

In the case of the marginal employee or chronic absentee, counseling has had widespread approval (Kuzmits, 1979; U. S. Department of Labor, 1943; Plummer and Hinkle, 1955). Porter (1973) described the marginal worker as one who may have problems with attendance, performance, or both. A motivated worker exerts enough effort to attend regularly, be on time, and perform at an adequate level.

Triandis (1973) described the harsh penalties instigated by the Communist government in Bulgaria when absenteeism was punished by removal to a forced work camp; however, now the system of bonuses, team competition, and group peer pressure has helped raise production and attendance.

### Rewards and incentives

In simplistic terminology, a reward is a reinforcement for a behavior which has the effect of increasing the likeli-

hood that the frequency and/or intensity of that behavior will reoccur. Porter (1973) and Wiard (1972) said that rewards are positively valued goal objects and reinforce the behavior or they increase the frequency of the response they follow. For rewards to be reinforcing depends on the extent they are desired as well as the manner in which they are delivered.

Attention can be an effective reward if it is desired by the receiver and given by a person who has high status or perceived power. Approval (Katz and Kahn, 1977) may have similar value and in addition supplies feed-back to the individual or group that the behavior has been recognized, and it is acceptable or laudatory.

McGinnies (1977) in discussing the role of incentives says:

"One way of facilitating task performance is to offer incentives for increased competence. The most generally effective incentive seems to be money, but money will serve this function only in situations where its potential as a reinforcer will not be offset by other aversive consequences" (p. 302).

A classic study by Pedalino and Gamboa (1974) involved giving each person a card each day as a reward for coming to work with the payoff at the end of the week in the form of a completed five-card poker hand and the chance of winning a \$20.00 pot. This experiment found good results in terms of

lowered absences even when the reinforcement was stretched to a two-week interval schedule. When a three-week break occurred, the absence rate soared above the beginning baseline level.

Lawler and Hackman (1969) working with cleaning teams experimented with participative incentive plans versus imposed pay incentive and found the change in attendance only associated with the participative group. A follow-up study one year later (Schefflen et al., 1971) indicated the participative group continuing to control absence rate better than the other groups.

Most incentive plans are monetary and are justified according to Locke (1977):

"One effect of a well-run incentive system is that (providing the workers value money) it will encourage workers to accept tasks and set goals that they would not accept or set on their own, i.e., for the intrinsic enjoyment of the work itself" (p. 276).

Lottery experiments, modeled after the Pedalino and Gamboa (1974) study, have been undertaken. Stephens and Burroughs (1978) offered two lottery systems in a hospital setting - one contingent on three weeks of perfect attendance and the other on eight randomly selected dates. Both systems yielded significant decreases in absenteeism, and no differences were found between the systems. Yukl et al. (1976) found that a continuous reward schedule yielded better results than a variable reward schedule. Robertson et al.

(1980) in a similar experimental design with two sections of a college class offered a lottery for four weeks of perfect attendance to one group and four opportunities for weekly lotteries. The clustering of the rewards in the variable-ratio group may have lessened the effect as the attendance was better under fixed-ratio schedule. According to Nord (1972), variable ratios should be stronger than fixed ratios.

Kempen and Hall (1977) attempted a three-year incentive program using privilege rather than monetary rewards. Although no statistical significance was obtained in comparing absence between several factories, they concluded that "social" significance of a positive nature resulted. This study was thwarted by lay-offs and pre-existing absenteeism policy.

Porter (1973) argued for increased use of incentives in this strong statement:

"In the future, organizations can assume a much more vigorous and imaginative role than they have in the past in motivating employees. Organizations can provide work incentives that will make the work situation both more rewarding and more satisfying for individuals as well as more helpful to organizational goal attainment. They can motivate employees by actively structuring reward environments" (p. 113).

Goal setting (Ronan et al., 1973; McClelland, 1977; Locke, 1977) as a form of feedback was found to produce improved performance. Sometimes goals and incentives are com-



bined as they were by Reid et al. (1978) who showed that criterion absence rate produced a reward of more frequent days off on weekends for work groups in response to their team's performance.

The topic of incentives and rewards leads to concern over the effect of external reward on intrinsic motivation. Daniel and Esser (1980) defined intrinsic motivation as the motivation to perform a task without apparent reward except that provided by the task itself, and extrinsic motivation as the task work motivated strictly for the external rewards that are received. Empirically testing task structure and interest relative to reward type, they proposed that high interest and low structure is more intrinsically rewarding, and that external inducements are not effective in enhancement of performance over time. The use of rewards did not negatively affect the intrinsic satisfaction with low interest tasks regardless of the level of structure. Although no application of this finding has been tested in the work-place, they theorize that by using this model a prediction of turnover and absenteeism for certain job situations might be made.

Expectancy theory (Vroom, 1964) was the basis of a study by Morgan and Herman (1976) in which they compared the absenteeism of blue collar workers with their perceptions of absence consequences. The high absentee workers had a lower

perceived notion of absence consequences. Staw (1977) relates expectancy and value theories' in this summary statement:

"Obviously, any error in evaluation or sudden change in the criteria of performance will sharply reduce the individual's perception that task accomplishment leads to rewards. As a consequence, the perceived objectivity or fairness of the appraisal system can be as important a determinant of the individual's task motivation as the actual contingency between rewards and performance" (p. 243).

Tokens were used to signal appropriate behavior in the workplace for marginal employees with punctuality problems in a South American industry (Herman et al., 1973). The outcome of the token economy, translated to a small monetary payment, was reduced frequency of tardiness but was not related to amount of time lost when tardiness occurred.

Phillips et al. (1971) used token reinforcement to change the social behavior of pre-delinquent boys. They discovered that the desired behavior increased just prior to the purchase of the reward and decreased just following the reward attainment.

Campbell (1952) found that for incentives to be effective they should be well understood by the recipients. He found more dissatisfaction among workers in large groups where there was also less understanding of the incentive system than among either the knowledgeable or unknowledgeable

workers in small-sized groups. Hamner (1977) and Katz and Kahn (1977) gave definite principles to be observed in the adaptation of behavior management techniques to organizational implementation. Cherrington et al. (1971) said:

"If rewards are not positively contingent, then the administration of rewards will not only fail to encourage performance increments it may also increase dissatisfaction and resignation among the highest producing employees" (p. 536).

## SUMMARY

The review of literature indicated a flurry of interest in the causation of absenteeism. Several theories gave rise to new investigations. Democratic leadership brought with it a wave of new studies comparing leadership styles and resultant absence patterns of the workers. Factors within the work environment relating to worker satisfaction, management control, and factors as broad as the work environment and general economic conditions in the country brought new insights and attempts to correlate these conditions with absenteeism and turnover in industry.

In the 1960s, management style and those components which make up the surveys were compared to absenteeism and turnover in an attempt to gauge the morale of the workers and predict "stayers" and "leavers" among the work force.

The same problems which were drawing attention in the 1940s, regarding who is responsible for absenteeism continued to nag management. Why don't the workers come to work and produce at the level expected?

Modern theorists offered many suggestions; worker participation in decision making, job attractiveness, attachment, valences related to the job and the outside environment, sick leave policy, management consideration and hindrance, and employee counseling.

Behavioral psychology is now looking for remedies in the form of increasing motivation by offering incentives. Too few studies at this time have been reported in the literature, but the future of behavior modification as a control of absenteeism looks promising. The next question will be how long does it take to condition workers to stay well and become sufficiently attached to the job to turn absenteeism into presenteeism? Absence measurement is coming of age, and the time seems ripe to work on remedial measures to correct the problem of absenteeism in the workplace.

SECTION I

COMPARISON OF ABSENTEEISM  
BY EMPLOYMENT CLASSIFICATION

Barbara D. North Chaplik

Iowa State University

Thirty-four female subjects and 67 male subjects working full-time, single shift; part-time, single shift; and part-time, split shift were compared to determine if there were absenteeism differences related to worker classification. It was hypothesized that full-time workers would have less absenteeism than part-time, single shift workers and that the part-time, single shift workers would have less absenteeism than split shift workers. Both work absence rate and absence frequency rate measures failed to support the hypothesis.

In the absenteeism literature there appeared to be a scarcity of studies on part-time workers and the contribution they have made to the labor force. The majority of studies involving absenteeism excluded part-time workers, because their absences may not have been recorded in the same manner as full-time workers and also because the job and skill levels were different. As some labor groups include fairly large percentages of part-time workers, the present study may be of particular interest to them as it attempts to bridge a gap in absenteeism research.

Gadourek (1965) in an extensive review of worker absences found that shift workers accounted for more absenteeism than non-shift workers when age was controlled.

Shepard and Walker (1956) compared three shifts and found more frequent absences during morning shifts. Behrend (1959) offered 'work interruption' as a possible link in explaining her Blue Monday measure to estimate voluntary absenteeism. Her premise was that a weekend interrupts the work rhythm and, therefore, contributes to higher absenteeism following weekends and holidays.

According to Mann and Sparling (1956) and Chadwick-Jones et al. (1973), the lower the skill of the worker the higher the rate of absenteeism. Nollen et al. (1978) related stress to absenteeism in their finding that white-collar, part-time workers had less absenteeism than blue-collar, part-time workers. They suggested that part-time work in stressful jobs may produce less absenteeism due to the relief from stress provided away from the job for a portion of the day.

The purpose of this study was to determine if worker classification and sex were related to absenteeism when the type of work was the same for all workers.

## METHODS

### The subjects

The subjects for this study were 101 school vehicle operators from the transportation section of a metropolitan school district. The mean age for the 34 females was 33.9



years and 45.2 years for the 67 males. One hundred thirty drivers were employed during the 1980-81 school term, but only the 101 drivers who were employed for the full period were included in this study. The average length of continuous employment of drivers in the district was 2.2 years.

Of the 101 subjects, 68 were employed part-time (20 hours/week) and 33 were employed full-time (40 hours/week). Table 1 shows the distribution of subjects by sex and work classification.

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Table 1 about here  
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#### The setting

The school district had a student population of about 36,000 which includes 5,100 students who were transported by the district utilizing 98 buses. The transportation operations section consisted of the drivers who were divided into three teams, and each team was supervised by a driver-manager. The driver-managers shared responsibilities for the operations with a dispatcher, a route-manager, and the head mechanic under the administrative control of the assistant supervisor for operations and the transportation supervisor.

Table 1. Percentage and number of total workers by sex group and classification of employment.

Sex	Total number	Classification (N)		
		Part-time split shift	Part-time single shift	Full-time
Female	34	76.47 (26)	0.00 (0)	23.53 (8)
Male	67	50.75 (34)	11.94 (8)	37.13 (25)

The salary and fringe benefits for the drivers were part of a contract negotiated between the union representing non-supervisory operations personnel and the school district. All leave periods were the same number of working days for both part-time and full-time drivers with the exception of paid vacation which was extended only to full-time employees. Unused medical disability leave could be carried over from year to year with no conversion provision at termination. Unused emergency, bereavement, or personal business leave days were forfeited at the end of each contract year.

#### The Measures

Work absence rate or man days lost is the standard measurement of the U. S. Department of Labor (Hedges, 1977; Miner, 1977), and popular in industry. Another absence measure, rate of absence frequency, is considered by Muchinsky (1977), Chadwick-Jones et al. (1973), and Garrison and Muchinsky (1977) to be more sensitive than work absence rate. The use of two measurements is for comparison purposes; however, this investigator prefers the frequency measure as it weights more heavily the type of absence that may be related to voluntary absenteeism and under probable control of the worker and management.

This study covered a period from the end of August to the first part of June when school was in session (184 days).

Absences of all type were considered in computing the work absence rate (W.A.R.) and the rate of absence frequency (R.A.F.) for the period considered. The unit of measure was either the number of occasions of absence or number of days absent divided by the number of work days.

$$\text{Rate of Absence Frequency (R.A.F.)} = \frac{\text{Number of Absence Frequencies}}{\text{Number of Workdays}}$$

$$\text{Work Absence Rate (W.A.R.)} = \frac{\text{Number of Absences}}{\text{Number of Workdays}}$$

R.A.F. does not reflect the number of days missed but only accounts for the occasions of absence. For example, an absence occasion might be a half-day, one day, or a ten-day absence. The W.A.R. is computed using the total number of workdays absent regardless of whether they were single days or consecutive days.

For a comparison of the computation of W.A.R. and R.A.F. consider this example. Three workers were absent five days each in one 20 day work period. The absence days were accumulated during two different illnesses for the first worker, one period of five days of illness for the second worker, and five separate one-day absences for the third worker. Using the W.A.R. formula the computation would be 15 days absent divided by the 20 scheduled work days times three workers or  $15 \div (20) (3) = 0.25$ . The R.A.F. counts the frequencies as in this computation: two occasions for the first worker, one

for the second worker, and five for the third worker. The number of absences is eight divided by the 20 work days times the three workers or  $8 \div (20) (3) = 0.13$ .

In this study, the number of absences or occasions of absence (frequencies) for each individual was summed and divided by the number of workdays (184). These summed ratios were then divided by the number of workers in the groups which were to be compared. The result of this computation is the same as the traditional formula.

## RESULTS

An analysis of variance was used to test for differences between the classification groups (full-time, part-time split shift and part-time single shift) and the sex of the workers (Table 2 and Table 3). Here it was clearly shown that the only differences are attributed to the sex of the drivers and no interaction was found. An arcsin transformation to equalize the variance when small proportions are compared (Snedecor and Cochran, 1967) was performed and no change was found in the level of significance. The analysis in Table 2 and Table 3 was transformed data.

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Table 2 about here

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Table 3 about here

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The means in Table 4 and Table 5 showed that women missed more days of work than men and demonstrated a higher rate of absence frequency.

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Table 4 about here

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Table 5 about here

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A Cronbach alpha (Nunnally, 1978) was computed on both measures using correlation matrices. The R.A.F.  $r$  value was .757 (Fisher  $z=.989$ ) for the raw data and .758 (Fisher  $z=.991$ ) when a square root transformation was performed. The W.A.R.  $r$  was .461 for the raw data and .488 when the data were transformed in an attempt to normalize the data. These correlation coefficients confirm the contention made by Muchinsky (1977) that the frequency measure is a more reliable one than days absent or W.A.R.

Table 2. Analysis of variance of W.A.R. for classification groups and sex.

Source	DF	SS	MS	F
Class.	2	.0056	.0028	1.29
Sex	1	.0265	.0265	12.11*
Interaction	1	.0032	.0032	1.49
Error	96	.2099	.0022	

\*p&lt;.001

Table 3. Analysis of variance of R.A.F. for classification groups and sex.

Source	DF	SS	MS	F
Class.	2	.0035	.0018	3.06
Sex	1	.0191	.0192	33.40
Interaction	1	.0000	.0000	0.00
Error	96	.0549	.0006	

\*p&lt;.0001

Table 4. Mean work absence rate and mean rate of absence frequency for two classifications of females.

Measure	N	Part-time split shift (N)	Full-time (N)
W. A. P.	34	.099 (26)	.096 (8)
R. A. F.	34	.065 (26)	.068 (8)

Table 5. Mean work absence rate and mean rate of absence frequency for three classifications of males.

Measure	N	Part-time split shift (N)	Part-time single shift (N)	Full-time (N)
W. A. R.	67	.056 (34)	.054 (8)	.079 (25)
R. A. F.	67	.037 (34)	.027 (8)	.040 (25)



## DISCUSSION

Contrary to some studies (Behrend, 1959; Nollen et al., 1978), this investigation found no difference between part-time and full-time workers' absence frequency within each gender group. A reasonable explanation may be that, in previous studies, the part-time workers have had lower pay and/or use different skills in their work. In the case of the same job but different rates of absence frequency or days, one must carefully examine the proportion of women in each classification as the female gender has historically been related to higher absenteeism, especially in the younger age groups (Chadwick-Jones et al., 1973; Porter and Steers, 1973; Hedges, 1973).

This finding of no difference in absences between full-time and part-time workers is a powerful statement to those employers who might be considering job-sharing or the addition of part-time workers to their work force. This test of differences is especially stringent as it compares part-time workers who work two two-hour shifts five days a week with workers who work a continuous eight hours.

It remains to be seen if women whether full or part-time can free themselves from family responsibilities or can maintain better health to become as reliable in their attendance as male employees.

The reduction in fringe benefits management feels obligated to provide for part-time workers could make employment of this type of worker more attractive to management. The advantage to those workers who prefer shorter work periods would be a wider selection of employment opportunities.

#### Reference Note

Additional findings related to this study are reported in a dissertation by this investigator; "The effect of positive attention, approval, and frugal incentives on the attendance of non-certificated school employees in an urban school district", Iowa State University, 1981.

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SECTION II

THE EFFECT OF ATTENTION, APPROVAL, AND FRUGAL  
INCENTIVES ON ABSENTEEISM OF BLUE-COLLAR WORKERS

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A low cost incentive program was used to reduce absenteeism among 101 blue-collar workers in an urban school district. The baseline for comparison was a three month period immediately preceding the treatment. The treatment effect was measured by the three month period immediately following the implementation of the incentive program. A significant reduction in absenteeism was found during the incentive period. Rate of absence frequency was the measure of absenteeism.

Several reviews of research relating to absenteeism have appeared in recent years (Gadourek, 1965; Chadwick-Jones et al., 1973; Porter and Steers, 1973; Muchinsky, 1977). Presently, with labor costs rising and inflation rates unpredictable, both public and private organizations have a keen interest in economizing their labor force (Kuzmits, 1979; Hawk, 1976). Absenteeism may be an area where costs can be cut if management is able to find an appropriate and low cost method of controlling employee absence behavior (Jeswald, 1974, Knowles, 1979, Plummer, 1960). Kuzmits (1979), has estimated the costs of absenteeism in the 15 to 20 billion dollar range annually in this country. As sick leave accounts for the greatest per cent of all absenteeism,

many companies have policies which either allow conversion of unused sick leave to bonus payments or additional vacation periods (Yukl et al., 1976; Robertson et al., 1980). The cost saving appears to be of less importance in these programs than the attempt to avoid disruptions in operations and production by reducing unscheduled absenteeism.

"In the future, organizations can assume a much more vigorous and imaginative role than they have in the past in motivating employees. Organizations can provide work incentives that will make the work situation both more rewarding and more satisfying for individuals as well as more helpful to organizational goal attainment. They can motivate employees by actively structuring reward environments" (Porter, 1973, p. 113).

Several studies involving monetary incentives have shown positive results in reducing absenteeism (Pedalino and Gamboa, 1974; Robertson et al., 1980; Stephens and Burroughs, 1978) as well as a few non-monetary incentive programs which have achieved the same effect (Kempen and Hall, 1977; Reid et al., 1978).

This study was an attempt to use positive attention, supervisor approval, and frugal rewards in an incentive program to reduce absenteeism of blue-collar workers. The concept of using frugal incentives was investigated partially because financial matters involving employees are generally a negotiated item when unions are involved. A second purpose was to see if the power of incentives lies in the monetary

value, or if recognition can provide sufficient reinforcement to effect change in employee behavior.

A study of employee absenteeism covering all departments in an urban school district indicated that operations personnel had high absenteeism when a days lost measure was used (Ebmeier and Tompkins, 1979). Their study comparing previous years with the 1978-79 school year was the stimulus which prompted this research using low cost incentives to attempt to reduce absenteeism among a segment of the school employee population.

## METHODS

### The Subjects and Research Setting

The subjects for this study were 101 school vehicle operators from the transportation section of a metropolitan school district. During the 1980-81 school year, there were 130 drivers employed; however, not all of these workers were employed throughout the full school term.

The 101 drivers, food service and school bus operators who were continuously employed during the school term constituted the subject group. This group was composed of 34 female and 67 male drivers. The mean age for the group was 41.4 years and the mean tenure of employment was 2.2 years. There were 33 full-time (40 hours/week) and 68 part-time (20

hours/week) workers in this population. Table 1 shows the distribution of workers by sex and work classification.

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Table 1 about here

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### The Research Setting

The school district has a student population of about 36,000 which includes 5,100 students who are transported by the district using 98 buses. The transportation operations section was composed of the drivers who were divided into three teams and each team was supervised by a driver-manager who shared responsibilities with a dispatcher and a route manager under the administrative control of an assistant supervisor and the transportation supervisor.

The salary and fringe benefits for the drivers were part of a contract negotiated between the union representing non-certificated operations personnel and the school district. Leave benefits were the same whether the employee was full or part-time when days of work were considered rather than hours per day. The only exception was paid vacation which was only extended to full-time employees. Unused medical disability leave could be carried over from year to year with no conversion at termination. Unused emergency, bereavement and



Table 1. Percentage and number of workers by sex and work classification (N=101).

	Percent of total (N=101)	Part-time split shift (N=60)	Part-time single shift (N=8)	Full-time (N=33)
Male	66.34	43.33	100.00	75.76
Female	33.66	56.67		24.24
Total	100.00	100.00	100.00	100.00

personal business leave days were forfeited at the end of each contract year.

The full leave benefits were in force at the onset of the contract year. That is to say, the 15 days of paid sick leave, two emergency days, and one personal business day were available at the beginning of the school year as benefits for the entire school term.

### The Research Design

#### The incentive program

A schedule of incentives was developed from easily prepared or inexpensive materials to reward consecutive periods of perfect attendance. This investigator, working closely with the supervisory staff, developed rules and rewards to encourage the drivers to strive for four-week periods of perfect attendance. The first three months (four-week periods without regard to months were used) of the incentive program included the following schedule:

First four-week period: During this period daily individual attendance was marked on a large poster for each team. Absences were not marked. At the end of each week (Monday through Friday) of perfect attendance, the driver-manager sent personal notes to those drivers on his/her team congratulating them and urging them to try for another perfect week.

Second four-week period: The congratulatory manager notes were continued weekly and the drivers who had achieved four consecutive weeks of perfect attendance had individual pictures and their names mounted in the Driver Showcase. The Driver Showcase was a 2' X 3' frame with a removable plexiglass cover and replaced the daily attendance roster. Each team had its own showcase. Throughout the incentive program, additional four-week periods of perfect attendance resulted in a gold star being placed below the driver's picture and name. Drivers who obtained eight consecutive weeks of perfect attendance were rewarded with a laminated name placard with magnets to affix the placard to the bulkhead of their vehicle.

Third four-week period: The managers' notes were phased out after each driver had received at least one. Stars were added as well as more drivers' pictures during this period. All conditions remained the same. The reward for twelve consecutive weeks of perfect attendance was a team badge. Team badges were made with a badge-making device. A cartoon representing the name or motto was drawn for each team.

#### Rules for perfect attendance rewards

A reward period was defined as a period from Monday to Friday which included no absences or tardies for any reason. The criterion of perfect attendance was simply being present for all scheduled work days in a week. The rewards were based on four consecutive weeks of perfect attendance and could be earned even if the weeks occurred in different months. For example, the last two weeks of February and the first two weeks of March could constitute a four-week period which would be rewarded by a picture in the showcase or a star depending on whether the first reward (picture) had been previously obtained. Rewards always involved four

consecutive weeks of perfect attendance.

Attention and approval were additional incentives provided by the daily attendance record, Driver Showcase pictures and stars, and recognition of employees who achieved the rewards in the transportation monthly newsletter which every driver received.

#### Measure of Absenteeism

Rate of absence frequency, (R.A.F.) reported by Huse and Taylor (1962); Chadwick-Jones, et al. (1973), Muchinsky (1977), Garrison and Muchinsky (1977) and others to be both more reliable and more sensitive than the traditional Work Absence Rate was the absence measure used. Support for using frequency rates was given by Campbell (1970) who found that 15 per cent of all sick leave was for one or less day. The frequency (without regard to length of absence) rate was defined by this formula.

$$\text{Rate of Absence Frequency (R.A.F.)} = \frac{\text{Number of Absence Occasions}}{\text{Number of Workdays}}$$

The comparison was made between the R.A.F. for the three months before the incentive period began (55 days) and the R.A.F. for the first three months of the incentive program (56 days). Only the 101 drivers who were employed for the entire school term were included in this study. Twenty-nine

workers who either were employed later in the school term or left during the year participated in the program, but they were excluded from these data.

#### RFSULTS

To test for the effectiveness of the incentive program, only the R.A.F. during the three months prior to January (excluding winter vacation) and R.A.F. during the three months of January, February, and March (excluding spring vacation) were compared. These months were chosen, because they immediately preceded and followed the implementation of the incentive program;, the number of days involved were similar and neither period involved the start-up and lay-off periods of the 1980-81 year. Table 2 presents the means for the two periods and Table 3 is the analysis of variance (two observations per subject). As a precautionary measure due to the small percentages represented in the data, an arcsin transformation to equalize the variances was applied (Snedecor and Cochran, 1967) and is presented in Table 3. There was no difference in the probability level due to the transformation.

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Table 2 about here

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Table 3 about here

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A Cronbach alpha (Nunnally, 1978) was computed on the rate of absence frequency measure (R.A.F.). The  $r$  value for raw data corresponding to the three months before the incentives were started was .519, and an  $r$  of .524 was obtained when a square root transformation was performed. The  $r$  for the period following the beginning of the incentives was .447 for the raw data and .446 when the data were transformed. The purpose of the transformation was to attempt to correct for skewedness in the distribution. With 100 degrees of freedom, these correlations were significant beyond the .01 level.

#### DISCUSSION

The finding that the use of incentives can reduce absenteeism was consistent with the results presented by Kempen and Hall (1977), Pedalino and Gamboa (1974), and Robertson et al. (1980). It is especially important to note that the effect of the incentives applied to the workers regardless of sex and age differences.

This study shows that buy-back systems or monetary bonuses for improved attendance may not be necessary in order

Table 2. Mean rate of absence frequency of workers (N=101) in non-incentive and incentive periods.

	<u>Non-incentive</u>	<u>Incentive</u>
Mean	.053	.043
S.D.	.036	.031

Table 3. ANOVA of treatment effect on all workers (N=101).

Source	DF	SS	MS	F
Treatment	1	0.005	0.005	4.24*
Error	200	0.230	0.001	

\*  $p < .05$

to achieve the desired behavior change. Perhaps management should consider low-cost programs with novel rewards that include approval and recognition for the workers before they initiate contracts involving more costly measures. The use of incentives relates well to the training of the middle management staff to use positive reinforcement to change worker behavior when specific goals are determined. The overt manifestations (stars, pictures, badges, etc.) of success allow the workers to monitor their own progress and take pride in their own accomplishments.

Futher research should include longer periods of incentive use to determine how well non-monetary rewards hold up over extended periods of time.

#### Reference Note

Additional findings related to this study are reported in a dissertation by this investigator; "The effect of positive attention, approval, and frugal incentives on the attendance of non-certificated school employees in an urban school district", Iowa State University, 1981.

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SECTION III

## THE EFFECT OF INCENTIVES ON HIGH ABSENCE WORKERS

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A low cost incentive program using attention, approval, and positive reinforcement was implemented to reduce absenteeism. The 101 subjects were blue-collar transportation employees in an urban school district. The incentive program was applied to all subjects. Using the rate of absence frequency to measure absenteeism, the high absence group was examined for improvement in attendance gained by the use of frugal incentives. A significant reduction in worker absence was found.

The cost of absenteeism to industry has been estimated at \$15 billion to \$20 billion annually (Kempen and Hall, 1977). In addition to classic studies relating absenteeism to sex of worker, age, satisfaction, withdrawal, leadership, and status (Mayo, 1945; Porter and Steers, 1973; Behrend, 1959; Brayfield and Crockett, 1955) a few researchers have attempted to change absenteeism through the use of incentive programs (Pedalino and Gamboa 1974; Lawler and Hackman, 1969; Kempen and Hall, 1977). According to some authors workers need additional motivation just to keep coming to work.

"Our general assumption was that if the totality of satisfactions that an employee obtains from the different aspects of his work situation were not enough to cause him to invest the extra energy occasionally required to get to the job, the

employee would be absent from work" (Metzner and Mann, 1953, p.483).

The present study explored the effects of a frugal incentive program utilizing attention, approval, and low cost rewards on the absenteeism of high absence employees. The use of frugal rewards was an effort to test the strength of attention and approval rather than a payback or monetary system as pay and leave are currently negotiated for the employees in the existing contract. The hypothesis tested was that the incentive program would reduce absenteeism in the high absenteeism group relative to the remainder of the group. The reward schedule was stretched from daily to weekly and finally to four-week reinforcement periods.

## METHOD

### Research Design

The hypothesis was tested in a field study. The periods to be compared were the period prior to the treatment intervention (non-incentive) and the post-intervention period (incentive). In order to avoid experimenter bias, no division of the subjects for high or low absenteeism was made until the data from the entire study were collected. The group representing 25 per cent of the subjects with the highest rate of absence frequency was considered arbitrarily as

the high absentee workers. It seemed prudent to compare the highest absence group with the rest of the workers to make a stringent test of the treatment. Due to differences in work days for part-time and full-time employees, no attendance data were collected during school vacation periods.

### Research Site and Subjects

The research was conducted in an urban school district's transportation department. The student population was approximately 36,000 of which 5,100 students were transported daily. Four hundred thirty-seven routes provided the flexibility for 98 buses to carry students to their assigned schools for special education programs, desegregation efforts to achieve racial balance, and to comply with state mandated transportation for students living the requisite minimum distance between their homes and their assigned schools. In addition to the bus drivers, ten food service vehicle drivers were employed. Direct supervision of all drivers was provided by three driver-managers. Other on-the-site supervisors included a route-manager, a dispatcher, and the assistant supervisor for transportation operations.

The subjects in this study were 101 drivers who had been employed during the full school term (184 days). Twenty-nine subjects who had worked for only part of this period were excluded from the data after the research was completed as

total year data were required to make an accurate comparison.

The drivers (101) were divided by work classifications of part-time (20 hours/week) and full-time (40 hours/week). Of the 34 female drivers, 26 were part-time and eight were full-time. The 67 males consisted of 42 part-time and 25 full-time workers.

With the exception of earned vacation, all other leave time was comparable between part-time and full-time employees when number of workdays were considered. For example, although part-time workers worked only four hours per day, they received 15 sick days as fringe benefit, but the 15 days of sick leave were 15 four-hour days. Each driver was allowed 15 workdays for medical leave, up to five days bereavement leave for each occasion, two emergency days, and one personal business day. The unused medical leave could be carried over to future contract years, but the unused emergency and personal business leave was forfeited at the end of the contract year. No provision for conversion or payback of leave time existed. Base pay for full-time drivers was \$6.77 per hour, and it was \$6.94 per hour for part-time drivers. Opportunities for overtime were assigned on a revolving basis.

## PROCEDURE

The investigator consulted with the driver-managers to plan the incentives and guidelines which specified how employees were to receive rewards. The discipline policy was adhered to for rule infractions, and the incentive program included only positive reinforcement. An incentive schedule was determined and implementation plans were established during the fall of the school year (September to November).

Notification of the employees concerning the incentive program was facilitated through a monthly news bulletin for school transportation workers at the end of December. The format of the program was discussed in the November labor-management meeting. The incentive program was described as a positive low-cost, non-monetary reward system to reinforce attendance, which would be implemented following the winter holidays.

The incentives:

Team attendance board: A roster and grid was drawn for each of the three teams including the team name, motto, and list of drivers' names with space for daily recording.

Driver Showcase: A large picture frame (2' x 3') with a plexiglass front was made for each of the teams. Color snapshots of each eligible driver was mounted in the picture frame with the driver's name below it.

Stars: Gold stars 3/4" in diameter were purchased to



place below the driver's name in the Driver Showcase.

Bus placards: Yellow cardboard strips were constructed with stick-on letters to form the driver's name. They were laminated and magnets were attached so the placard could be mounted on the vehicle bulkhead.

Team badges: Three separate cartoons representing the three teams were drawn and were used for the face of the badges. The badges were assembled using a badge-making press.

Bus key chains: Yellow school buses cut out of plastic with the name of the driver and the school district embossed on the face were constructed with a key chain attached. These were purchased from an independent supplier.

Bus name pins: The same template as the key chain was used with a pin attached to the back.

### Reinforcement schedule

The scheduling of rewards was intended to produce these three conditions: to communicate to the employee that attendance was the desired behavior, to provide approval for perfect one week and then four-week intervals of maintained attendance, and to produce visible rewards for perfect attendance. The reinforcers used were as follows:

Daily green circles were marked on the team attendance board when the criteria (being on time and present for the scheduled daily work period) were met.

Weekly congratulatory notes were sent from the

team's driver-manager when a full week of attendance was achieved (Monday through Friday).

Four consecutive weeks of perfect attendance earned a picture on the Driver Showcase and mention in monthly newsletter for the employee. (Gold stars below the picture and name denoted additional periods of four weeks without absence.)

Eight consecutive weeks of perfect attendance earned the driver a personalized name placard for use inside the vehicle plus his/her name in the monthly newsletter.

Twelve consecutive weeks of perfect attendance resulted in the driver receiving a team badge and recognition in the monthly newsletter.

Sixteen consecutive weeks of perfect attendance produced the personalized school bus key chain and continued listing of award winners in the newsletter for the deserving driver.

Twenty consecutive weeks of perfect attendance earned the driver the highest award, a bus template name pin.

Prior to the last five weeks of school a lottery was initiated as an attempt to counter the tendency of the employees to use any remaining leave time. A card was drawn on Monday by each driver who had evidenced a previous week of perfect attendance. The cards were kept by the drivers and recorded by the driver-manager for the eligible team members, and the best poker hand (all five cards) was chosen for a \$20

pot for each team.<sup>1</sup>

### Data collection

Daily attendance was collected throughout the 1980-81 school year for each driver. The intervention began with the attendance boards in place following the winter break. The boards were mounted on an inside wall of the drivers' lounge area. After the first four weeks of visible attendance recording, the Driver Showcase replaced the boards, and the weekly attendance information was kept by the driver-managers. The researcher received daily absence information from the dispatcher to whom the drivers reported. The dispatcher prepared the absence report for the payroll department.

### Measurement

Two systems of absenteeism rates are currently found in the literature. The author prefers the rate of absence frequency (R.A.F.) and finds support (Huse and Taylor, 1962; Chadwick-Jones et al., 1971; Latham and Pursell, 1975) for

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<sup>1</sup>Due to additional activities involved with the end of the school term, this attempt at using a lottery-type incentive was not administered consistently throughout the entire driver group. Therefore, it was not evaluated as a treatment.

its greater reliability and sensitivity as it is more influenced by short absences. Only the number of absence occasions is counted regardless of whether it is one-half day, two days, or 10 days. This formula is illustrated as:

$$\text{R.A.F.} = \frac{\text{Number of Absence Occasions}}{\text{Number of Workdays}}$$

The second measure, time lost, or work absence rate (W.A.R.) is included as a comparison, although Muchinsky (1977) and others felt it was less appropriate because of its lack of and/or low reliability. W.A.R. is more heavily weighted by long absence periods than is the R.A.F. measure.

$$\text{W.A.P.} = \frac{\text{Number of Days Lost by Absence}}{\text{Number of Workdays}}$$

The absences were collected for each individual and a rate of frequency was computed. The individual rates were summed by month and combined for the three month periods and divided by the number of days represented by the three month period. Figure 1 presents the raw data and Table 1 presents the absence frequency means for all drivers in the study (N=101) during the non-incentive period prior to the group's division into high and low absence classification.

The high absence group included the highest 25 per cent of the subjects for absence frequency, which in fact were

those with six or more occasions of absence during the non-incentive period (N=24). In reality the high absence group contained only the highest 24 per cent because to reach 25 per cent would have involved splitting a large group with five absences. It seemed important to be sure the group labeled high absence was above the median group absence frequencies rather than to include that group in the high absence designation.

The high absence group consisted of 16 females and eight males with an average age of 35.5. The low absence group included 18 females and 59 males with a mean age of 43.2.

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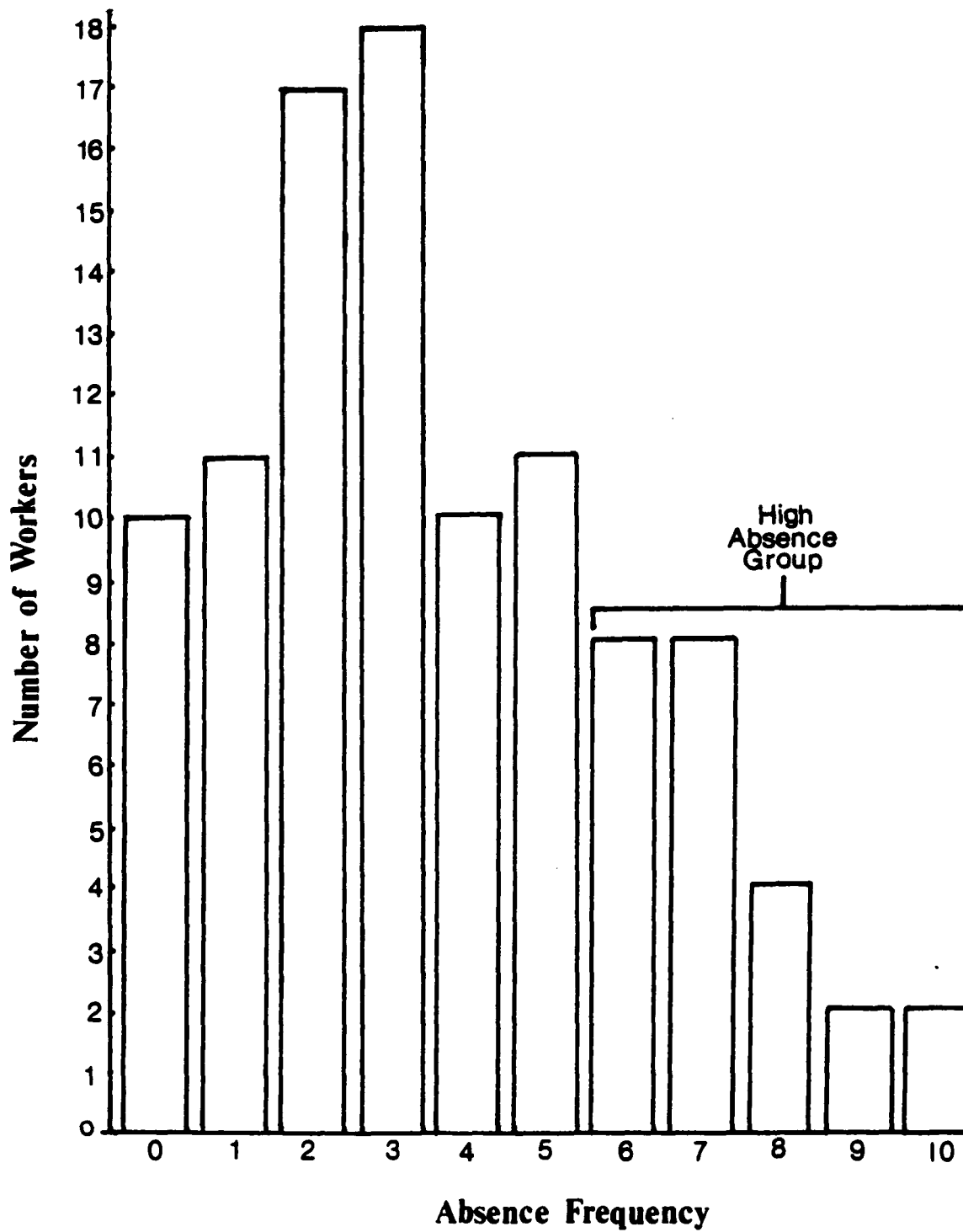
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**FIGURE 1: Distribution of Absence Frequency**

Table 1. Mean rate of absence frequency (R.A.F.) for all workers during the non-incentive period.

	Aug.	Sep.	Oct.	Nov.	Dec.
Mean	.012	.677	1.040	1.030	.901
S. D.	.108	.831	1.019	.932	.878
No. of workdays	2	21	23	18	15

## RESULTS

Table 2 presents the mean absence rates for the high and low absence workers. Table 3 shows the analysis of variance of the high and low absence groups (two observations on each subject). The difference between the two groups confirmed that the initial difference between the groups was stable over the entire period including the incentive or treatment period ( $p < .0001$ ). The interaction showed the use of incentives significantly reduced R.A.F. of the high absence group ( $p < .005$ ).

Because of the small ratios, an arcsin transformation to equalize variance was performed on the data in the analysis of variance (Snedecor and Cochran, 1967). No difference was found in the probability level. Transformed data are reported in this analysis of variance. The interaction effect (ordinal) is presented in Figure 2.

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Table 2 about here  
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A Cronbach alpha (Nunnally, 1978) was computed on the frequency measure using correlation matrices. The R.A.F.  $r$  value was .633 for raw data with a Fisher  $z$  of .746 for the period prior to the incentive program. The  $r$  for the same period, when the data were transformed by a square root procedure to correct for possible skewedness in the distribution, yielded a correlation coefficient of .637 and a Fisher  $z$  of .744. The Cronbach alpha  $r$  for the period after the incentive was .620 with a  $z$  of .725 on the raw data. The transformed data had a  $r$  of .620 and a  $z$  of .725. All of the correlations were significant with 100 d.f.,  $p < .01$ .

#### DISCUSSION

This study yielded additional information regarding the effect of a low-cost, fixed ratio incentive program on a high absentee group of blue collar workers. The data supported the finding that an incentive program could reduce absenteeism among high absence workers. In fact the high absence group rate of absence frequency was reduced by 20 per cent. Although there appeared to be a slight rise in absence frequency among the low absenteeism group, this change was

Table 2. Mean P.A.F. of high and low absence groups in non-incentive and incentive periods.

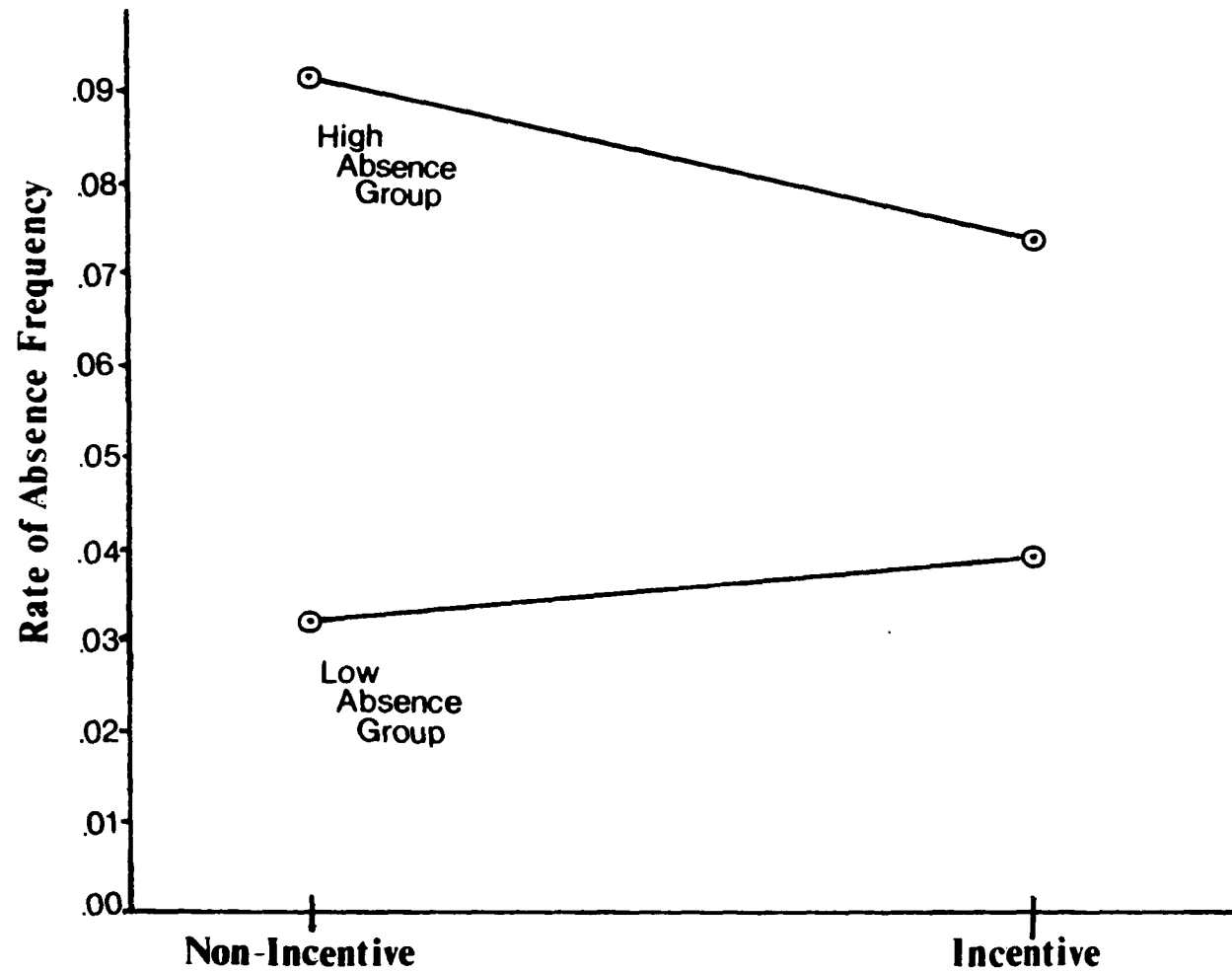
	N	Non-incentive		Incentive	
		Mean	S.D.	Mean	S.D.
High absence	24	.0917	.0159	.0738	.0314
Low absence	77	.0319	.0199	.0388	.0245

Table 3. Analysis of variance of R.A.F. for absence groups and treatment conditions.

Source	DF	SS	MS	F
Treatment	1	.00005	.00005	.10
Absence grp.	1	.0823	.0823	156.34**
Interaction	1	.0057	.0057	10.79*
Error	198	.1042	.0005	

\*  $p < .005$

\*\* $p < .0001$



**FIGURE 2: Treatment Interaction of High and Low Absence Groups**

not significant.

That the attention of the workers was directed to attendance at the onset of the program was confirmed by the fact that a grievance was filed against management after the daily attendance boards were installed. In response to the grievance, the daily attendance boards were removed after the first four weeks of the incentive program and replaced by the Driver Showcases. Other observations were made of pranks involving the attendance board, magazine pictures fastened over the drivers' pictures on the Driver Showcase cover glass, efforts to pilfer team badges, and inquiries regarding the purchase of the bus key chains as new incentives were won.

Additional research involving work-related low cost incentives needs to be performed to extend the finding of this study. It may be that buying back unused sick leave or providing monetary incentives are no more effective than frugal rewards. This researcher feels that the attention and approval which was given to the workers by the managers was of great value although there was no way of determining which portion of the incentive program produced the largest share of the results. Another outcome of this study is that frugal incentives do not change the attendance of workers who are already evidencing good attendance. It appears it is not fruitful to use incentives to reward workers who are already exhibiting the target behavior. However, considering the

findings by Garrison and Muchinsky (1977) that the high absence groups change and new ones appear, the rewards may help to prevent new absenteeism groups from forming over time.

The low cost and non-monetary aspects of this incentive program should encourage its use in private as well as public industrial application. The application of incentives for absenteeism-prone workers may not have to be expensive to be effective.

#### Reference Note

Additional findings related to this study are reported in a dissertation by this investigator: "The effect of positive attention, approval, and frugal incentives on the attendance of non-certificated school employees in an urban school district", Iowa State University, 1981.

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## DISCUSSION

The discovery that women miss more work days than male workers was in support of findings by Freedman, 1967; Hedges, 1973; Campbell, 1970; Behrend, 1959; Kerr et al., 1951, Nicholson, 1975; and others. Although there is no clear evidence, it appears on the surface that the culture still supports the nurturing role of women. Since an ever-growing number of women are single parents, there may be fewer alternatives for child care when sickness or accidents disrupt the usual child care arrangements. Among two-parent families, the woman's work may have a secondary importance and, as a large proportion of the women in this study had part-time classification, the loss of pay may not have been viewed as significant.

Another category of personal characteristics which has been investigated in the past is that of age and its effect on absenteeism. This study found no clear cut evidence of absenteeism related to a particular age group. The information gathered was more related to the measurement used than to the age groups studied, especially when sex was partialled out as an existing variable.

The analysis of work classification yielded surprising results as differences in all three groups' absenteeism was expected. To control for sex related absence differences,

only same sex groups were compared against the two or three types of work classification. The finding of no significant differences is contrary to what would be expected based on attachment theory (As, 1962; Mann and Sparling, 1956; Hackman and Lawler, 1971; Knowles, 1979) if one assumes that part-time workers make less emotional investment in their jobs. Little is known about part-time workers except as presented by Nollen et al. (1978). Field studies and industrial research either investigated only work groups composed of full-time employees, or the part-time workers were left out of the study.

This current research effort applies a stringent test as the split-shift workers were compared to single-shift and full-time workers. Logically, one might speculate that making two efforts to get to work would require twice the motivation and present twice as many opportunities for absenteeism. The implication that can be drawn from this startling evidence in regards to frequency of absence is that job-sharing and hiring of part-time employees (perhaps from a pool of older people or workers with other responsibilities) may be more appealing to employers as some expense may be saved in employee benefits.

Another possibility to be considered, as suggested by Baumgartel and Sobol (1959), is that part-time work may provide reduction of stress. The working conditions which are



encountered by school bus drivers may place them in a high stress producing occupation.

The finding that high absence workers responded positively by reducing their absenteeism in response to positive frugal incentives was, of course, the major finding of this study. The fact that reduction in absenteeism was achieved was particularly encouraging in spite of the fact that no face-to-face opportunity existed to plan the incentives or discuss the program with the workers. All information was communicated by a monthly newsletter and an occasional one-to-one meeting between individual workers and their manager as the researcher functioned only in the role of a consultant. As a result of the lack of groups meeting opportunity, perhaps some false information and needless concern among the workers accompanied the incentive program. The formal grievance was an indication of resistance as were the games and interference exhibited in regard to the daily attendance board. In light of this study, however, there was no chance that the emphasis on attendance was ignored or overlooked by the workers. The attendance board definitely attracted sufficient attention.

The note-writing of the managers was complained about by about one-sixth of the drivers, and that reinforcement was gradually withdrawn after the second four-week period. Some resistance existed in regard to taking the snap shots

preparatory to the implementation of the Driver Showcase in two of the three teams; however, names were mounted and the option to request a picture, after a couple of attempts by the managers, was left up to the drivers. The managers attempted to ignore poor attendance and reward good attendance as much as possible throughout the incentive period. If a driver refused to have his/her picture taken or asked not to have a weekly note from the manager, the driver's wishes were respected. Verbal praise continued from the driver managers when attendance was acceptable or conditions forced drivers to make additional efforts to meet the district's goals.

It was found that constant support was required and monitoring, at least on a weekly basis, was needed in order to keep the incentive program operating in a uniform manner. Administrative sanction and enthusiasm was vital and well-communicated throughout this study.

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APPENDIX A

Introduction

This section was included for the purpose of presenting the research hypotheses that guided this study. Several of these were tested and are found in Section I, Section II, and Section III of this study. The hypotheses which appeared in the manuscripts are formally listed in the list which appears below. However, several of the other hypotheses were alluded to in the introduction and discussion and require some additional explanation as to the results regarding additional findings of this larger study. The hypotheses will be presented, then the findings which will include a brief statement supported when appropriate by tables found at the end of this section.

## HYPOTHESES

1. There is no difference between rates of absence frequency when the period of non-incentives is compared with the incentive period.  $\alpha=p<.05$ .
2. There is no difference in work absence rates when the period of non-incentives is compared with the incentive period.  $\alpha=p<.05$ .
3. There is no difference between rates of absence frequency when male and female subjects are compared.  $\alpha=p<.05$ .
4. There is no difference in work absence rates when male and female subjects are compared.  $\alpha=p<.05$ .
5. There is no difference in rates of absence frequency when job classifications are compared.  $\alpha=p<.05$ .
6. There is no difference in work absence rates when job classifications are compared.  $\alpha=p<.05$ .
7. There is no difference in rates of absence frequency when age groups are compared.  $\alpha=p<.05$ .
8. There are no difference in work absence rates when age groups are compared.  $\alpha=p<.05$ .
9. There is no difference of high absence workers in rates

of absence frequency due to treatment.  $\alpha=p<.05$ .

10. There is no difference in rates of absence frequency when days of the week are compared.  $\alpha=p<.05$ .

11. There is no difference in rates of absence frequency when tenure groups are compared.  $\alpha=p<.05$ .

12. There is no difference in work absence rates when tenure groups are compared.  $\alpha=p<.05$ .

## Findings for the hypotheses

1. There is no difference between rates of absence frequency when the period of non-incentives is compared with the incentive period. The data support the rejection of this hypothesis.

Using the period three months prior to the treatment as representative of a stable non-incentive period and the three month period following the onset of the incentive program as the comparison period, the analysis of variance of R.A.P. and treatment yielded a significant difference ( $p < .05$ ). Means of the non-incentive period and the incentive period R.A.P. and the analysis of variance are presented in Table 1 and Table 2.

2. There is no difference in work absence rates when the period of non-incentives is compared with the incentive period. The data fail to reject this hypothesis.

No significant differences were found when the W.A.R. of the non-incentive period was compared to the incentive period (Table 3).

3. There is no difference between rates of absence frequency when male and female subjects are compared. The data support the rejection of this hypothesis.

In an analysis of variance comparing worker classification by sex the only significance found was the effect of sex

and R.A.F. (Table 4). The same was true when sex and incentive treatment were subjected to an analysis of variance ( $F=49.51$ ,  $p<.0001$ ). No interactions were found with either classification or sex.

4. There is no difference in work absence rates when male and female subjects are compared. The data support the rejection of this hypothesis.

When males and females were compared on the basis of V.A.R. and treatment an analysis of variance yielded a significance ( $F=14.14$ ,  $p<.0005$ ). When classification groups and sex were tested by an analysis of variance, the difference was significant at the  $p<.001$  level (Table 5).

5. There is no difference in rates of absence frequency when job classifications are compared. The data fail to reject this hypothesis (Table 4, Table 6, Table 7).

6. There is no difference in work absence rates when job classifications are compared. The data fail to reject this hypothesis (Table 5, Table 6, Table 7).

7. There is no difference in rates of absence frequency when age groups are compared. The data support the rejection of this hypothesis.

Rates of absence frequency of the five age groups were compared in an analysis of variance. A significant differ-

ence was found ( $p < .0001$ ). Table 8 shows the mean R.A.F. of each age group and Table 9 presents the analysis of variance. Duncan's test of comparisons finds the youngest group having a greater frequency rate of absence than the other four groups ( $p < .05$ ).

8. There is no difference in work absence rates when age groups are compared. The data fail to reject this hypothesis. Table 10 shows the W.A.R. age group means and Table 11 shows the analysis of variance.

9. There is no difference of high absence workers in rates of absence frequency by treatment. The data support the rejection of this hypothesis.

When the high absence group was compared with the remainder of the workers in an analysis of variance, a significant difference was found ( $p < .001$ ). Table 12 presents the means for both absence groups and Table 13 presents the analysis of variance. An interaction effect indicates a relationship between the absence groups and the treatments ( $p < .005$ ).

10. There is no difference in rates of absence frequency when days of the week are compared. The data fail to reject this hypothesis.

Table 14 gives the R.A.F. means and Table 15 gives the analysis of variance.

11. There is no difference in rates of absence frequency when tenure groups are compared. The data support the rejection of this hypothesis.

The workers were divided into groups by year of hire and their R.A.F. were subjected to an analysis of variance. A significant difference in absence rate was found ( $p < .005$ ). A Duncan's test of comparisons was made and the "new hires" (1980) had a lower R.A.F. than the other two groups ( $p < .05$ ). The means for these groups are found in Table 16 and the analysis of variance in Table 17.

12. There is no difference in work absence rates when tenure groups are compared. The data support the rejection of this hypothesis.

An analysis of variance of W.A.R. for the three groups of workers by hiring period (tenure) is presented in Table 18. The difference between the groups is significant at the  $p < .05$  level. Duncan's test of comparisons found the 1980 group to be absent less than either of the other groups and the group hired before 1979 to be absent more than the other two groups.



Table 1. Mean rate of absence frequency of workers (N=101) in non-incentive and incentive periods.

	<u>Non-incentive</u>	<u>Incentive</u>
Mean	.053	.043
S.D.	.036	.031

Table 2. ANOVA of treatment effect on all workers (N=101).

Source	DF	SS	MS	F
Treatment	1	0.005	0.005	4.24*
Error	200	0.230	0.001	

\*  $p < .05$

Table 3. Analysis of variance of W.A.R. and incentives.

Source	DF	SS	MS	F
Treatment	1	.0022	.0022	0.35
Error	200	1.2718	.0064	

Table 4. Analysis of variance of R.A.F. for classification groups and sex.

Source	DF	SS	MS	F
Class.	2	.0035	.0018	3.06
Sex	1	.0191	.0192	33.40 *
Interaction	1	.0000	.0000	0.00
Error	96	.0549	.0006	

\*p&lt;.0001

Table 5. Analysis of variance of W.A.P. for classification groups and sex.

Source	DF	SS	MS	F
Class.	2	.0056	.0028	1.28
Sex	1	.0265	.0265	12.11*
Interaction	1	.0032	.0032	1.48
Error	96	.2099	.0022	

\*p&lt;.001

Table 6. Mean work absence rate and mean rate of absence frequency for two classifications of females.

Measure	N	Part-time split shift (N)	Full-time (N)
W.A.P.	34	.099 (26)	.096 (8)
R.A.F.	34	.065 (26)	.068 (8)

Table 7. Mean work absence rate and mean rate of absence frequency for three classifications of males.

Measure	N	Part-time split shift (N)	Part-time single shift (N)	Full-time (N)
W.A.F.	67	.056 (34)	.054 (8)	.079 (25)
R.A.F.	67	.037 (34)	.027 (8)	.040 (25)

Table 8. Mean rates of absence frequency by age groups.

	<31	31-40	41-50	51-60	>60
Mean	.0679	.0483	.0458	.0316	.0363
S.D.	.0280	.0298	.0242	.0190	.0203
N	22	20	21	19	19

Table 9. Analysis of variance of B.A.F. for age groups.

Source	DF	SS	MS	F
Age	4	.0169	.0041	6.65*
Error	96	.0590	.0006	

\*p&lt;.0001

Table 10. Mean work absence rate by age group.

	<31	31-40	41-50	51-60	>60
Mean	.0913	.0904	.0716	.0569	.0664
S.D.	.0393	.0735	.0439	.0379	.0366
N	22	20	21	19	19

Table 11. Analysis of variance of W.A.P. for age groups.

Source	DF	SS	MS	F
Age	4	.0187	.0047	1.98
Error	96	.2265	.0024	

Table 12. Mean R.A.F. of high and low absence groups in non-incentive and incentive periods.

	N	Non-incentive		Incentive	
		Mean	S.D.	Mean	S.D.
High absence	24	.0917	.0159	.0738	.0314
Low absence	77	.0319	.0199	.0388	.0245

Table 13. Analysis of variance of P.A.F. for absence groups and treatment conditions.

Source	DF	SS	MS	F
Treatment	1	.00005	.00005	.10
Absence grp.	1	.0823	.0823	156.34**
Interaction	1	.0057	.0057	10.78*
Error	198	.1042	.0005	

\*  $p < .005$ \*\* $p < .0001$ 

Table 14. Weekday means for absence frequency.

	<u>Mon</u>	<u>Tue</u>	<u>Fed</u>	<u>Thur</u>	<u>Fri</u>
Mean	2.101	2.307	2.436	2.218	2.366
S.D.	2.014	1.891	1.873	1.683	1.654

Table 15. ANOVA for absence frequency by the day of the week.

Source	DF	SS	MS	F
Days	4	6.5941	1.6485	0.49
Error	500	1670.7723	3.3415	

Table 16. Mean rates of absence frequency by tenure group.

	1980 hires	1979 hires	<1979 hires
Mean	.0633	.1166	.0942
N	24	29	48



Table 17. Analysis of variance of R.A.F. and tenure groups.

Source	DF	SS	MS	F
Tenure	2	.0091	.0046	6.76*
Error	98	.0662	.0007	

\*p&lt;.005

Table 18. Analysis of variance for W.A.R. and tenure groups.

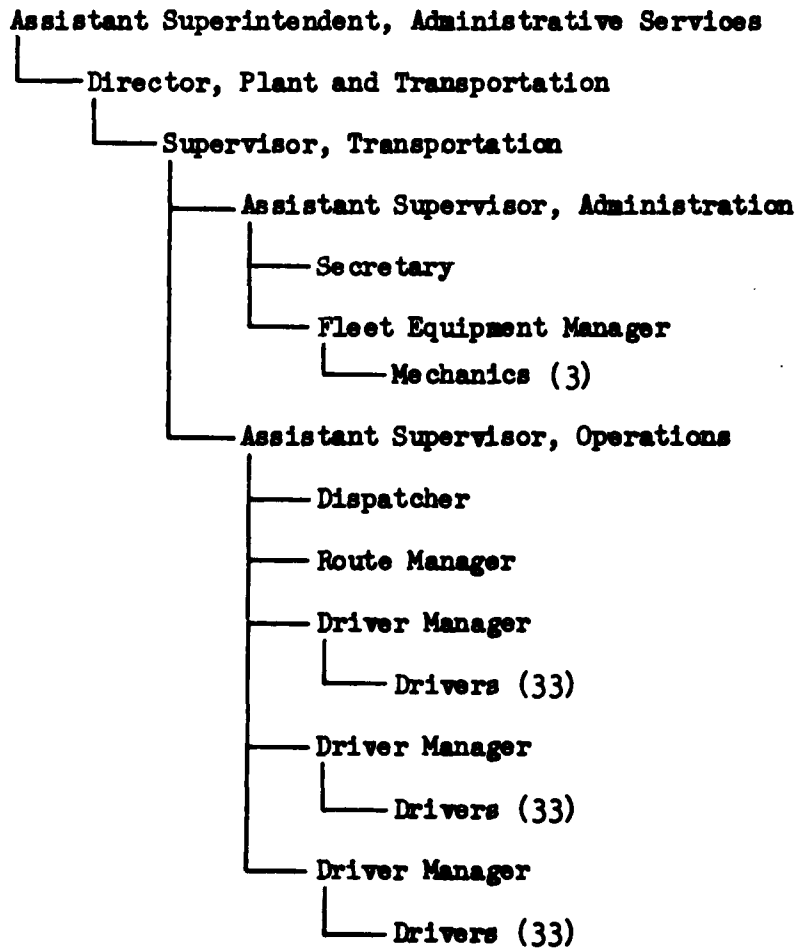
Source	DF	SS	MS	F
Tenure	2	.0208	.0134	4.54*
Error	98	.2244	.0023	

\*p&lt;.05

APPENDIX B  
Additional tables

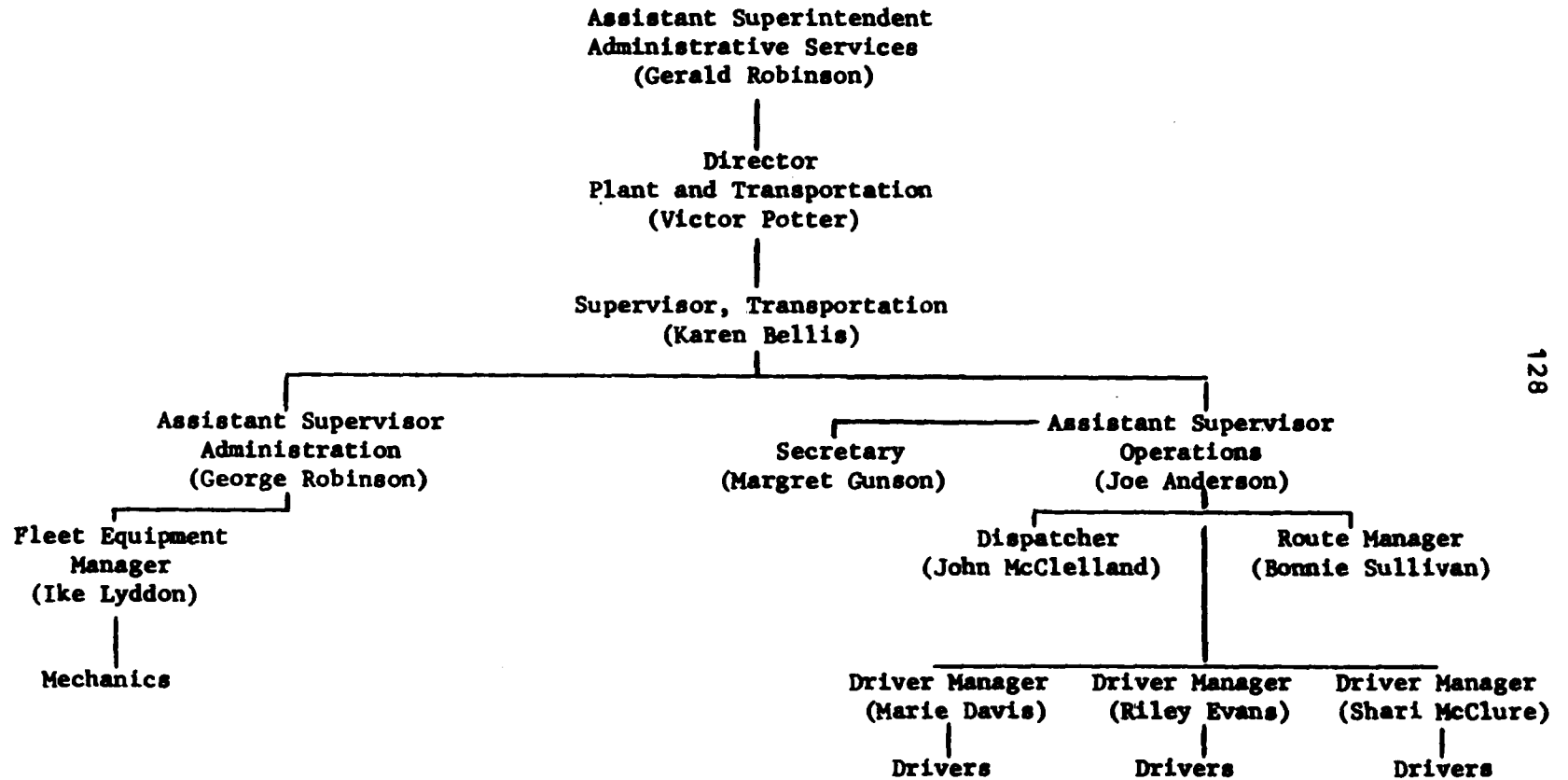
## TABLE OF ORGANIZATION FOR TRANSPORTATION

July 1, 1980



TRANSPORTATION DEPARTMENT

TABLE OF ORGANIZATION



128

8-4-80

**DEPARTMENT OF PLANT AND TRANSPORTATION  
EVALUATION**

Name \_\_\_\_\_

129

Department \_\_\_\_\_

Date \_\_\_\_\_

	Excellent 1	Good 2	Fair 3	Poor 4
Willingly assumes responsibility				
Maintenance of vehicle				
Discipline on bus				
Driving habits				
Maintains schedules				
Safety record				
Record keeping				
Looks for work when there are no assigned duties				
Appearance				
Attendance				
Punctuality				
Ability to work with others				
Physical condition				
Knowledge of assignments				

**QUALIFIED TO OPERATE**

\_\_\_\_\_ 66 Passenger Bus

\_\_\_\_\_ Food Truck

\_\_\_\_\_ 30 Passenger Bus

\_\_\_\_\_ Dump Truck

\_\_\_\_\_ Wheelchair Bus

\_\_\_\_\_ Snow Plow and Tractor

\_\_\_\_\_  
Appraised by

\_\_\_\_\_  
Reviewed by

\_\_\_\_\_  
Employee's signature indicating he or she  
has reviewed form

COMMENTS: \_\_\_\_\_

# TRANSACTION

130



THE TRANSPORTATION NEWSLETTER OF THE

PUBLIC SCHOOLS

APRIL 1981

## ROAD-E-O REPORT

In spite of rain, chill and wind factors, our preliminary ROAD-E-O was held on Saturday, April 4, with 18 drivers competing for six places to advance to the Regional Competition scheduled for Saturday, April 25.

The high scorers were:

		<u>Score</u>
First	Harry Stanley	222
Second	Jeanette Woods	217
Third	Sue Denny	199
Fourth	Connie Perry	198
Fifth	Marlys Wimber	186
Sixth	Linda Carico	184

### Alternates

First	Mick Horner	176
Second	Fuller Mortimer	175

Congratulations to all who so willingly supported this concept of improving skills, knowledge and professionalism among our driver ranks. Others who benefited from this unique driving experience were:

Frank Ayres	Harry Postal
Jeanine Bourne	Ted Ramsey
Terry Green	John Rohlf
Carolyn Lovelace	Bill Stewart
Jim Padgett	Mike Walden

A special thank you to JACK FOGELSON for his work in building and setting up the ROAD-E-O course and equipment. Without his efforts, the ROAD-E-O would not have happened.

Our six contestants and their "event" coaches (BONNIE, JOHN AND IKE) were busy perfecting more skills at the Monroe School parking lot again on Saturday, April 11.

\*\*\*\*\*

WELCOME ABOARD to new bus drivers, MIKE POLAND and MICHELLE LANSEY-JONES.

\*\*\*\*\*

PICNIC PLANS PROGRESS

131

- RETIREES RECOGNITION -

DOOR PRIZES - RAFFLE - GOOD TIMES

The committee is busy gathering ideas, items and interest. Mark your calendar now for May 30 at Union Park Shelter House. More details will be announced in a flier to follow.

\*\*\*\*\*

MEDICAL EXAMS FOR 1981-82 SCHOOL YEAR

Drivers who wish to take advantage of Health Services' offer to perform our annual state-required physicals should note:

Date: Friday - June 5, 1981  
Time: 8:00 a.m. - 10:00 a.m.

12:00 - 4:00 p.m.

Place: King School

Tests: Hearing

Vision	Heart & Lung check
a) Color check	Blood Pressure
b) Field of vision	Urinalysis
Height - Weight	Tine (Tuberculosis)
Pulse	Temperature

This special service is a no-cost benefit to each transportation employee.

Anyone not taking advantage of the above opportunity should note that all information required to obtain a Bus Driver's Permit for the 1981-82 school year will need to be submitted to JOE ANDERSON not later than Friday, August 14, 1981.

\*\*\*\*\*

SUMMER SCHEDULES . . . are still being developed. As noted last month, Yellow bus transportation will be provided only for Smouse and Van Meter students and a maximum of 200 ESL students at Brody. The New Horizons program remains scheduled on a contract basis. Efforts continue to find more opportunities to provide service where funding is available.

When more definite needs are known, more information will be shared.

\*\*\*\*\*

MILEAGE MISERS . . .

132

Gasoline costs continue to escalate. The higher they climb, the more significant our conservation efforts become.

SHIRLEY BAIRD found 13 excess miles on her daily routes.

ROCKY WESTON uncovered eight unnecessary miles in his journeys each day.

JIM PADGETT has trimmed five miles from his route travels each day.

These route changes have been OK'd and add significantly to our efficiency and operational safety. THANKS!

\* \* \* \* \*

COMPLIMENTS . . .

. . . for BOB FENTON from Deborah Deardon, teacher at Smouse, for Vision Impaired children. BOB has been taking them to the Ice Arena the last few weeks. She said she really appreciated his kindness and consideration with the children, even skating with them which they though was great---and so do we.

. . . to NORM RIVERS from the East High Athletic Department for a fine trip to Ames.

. . . to MARR GENEVA OUSLEY from her elementary students (in the form of a \$25 gift certificate for her birthday).

\* \* \* \* \*

HARRY STANLEY and LINDA SMITH have teamed up to treat some of their students at a local pizza place. STAN sponsored four 6th graders while LINDA treated four Hoak 8th graders. LINDA and STAN have had each of these students for four years.

\* \* \* \* \*

FOR YOUR INFORMATION AND USE:

Question No. 1: Must a school bus driver stop the school bus if the railroad is abandoned or unused, but the railroad warning sign and crossbuck sign remain in place?

Answer: Yes.

Question No. 2: Must a school bus driver stop the school bus if the tracks remain in place, but the railroad warning sign and crossbuck sign have been removed?

Answer: Yes.

Question No. 3: Must a school bus driver stop the school bus if the tracks and railroad warning sign and crossbuck sign remain in place, but the EXEMPT sign is utilized?

Answer: Yes.

---



GO FOR GREEN

133

The team badges have been awarded to each individual who has achieved 12 consecutive weeks of perfect attendance. Each badge carries your team slogan and your team name plus artwork representing your team slogan.

If you have a name placard that is not secure in its placement on the bulk-head, the Driver Managers have demonstrated expertise in paring them down to size and attaching additional magnets. Bring your 8th week reward in for trimming if it is needed.

Soon the drivers eligible for 16 weeks rewards will receive the clever key-chains that are being custom-made. Since these are personalized, they will be presented about a week after they are earned.

The "Driver Showcase" is filling with pictures and stars. Gary Fox certainly has a unique and clever picture! Such a distinction for the Trailblazers!!

Plans are underway for an end-of-the-year climax to the "Go for Green" project. Joe Anderson will have the details conspicuously posted in the very near future.

Congratulations to our new award winners. Keep up the good work and get ready for the big end-of-the-year event! These winners include only those qualifying since the last TRANSACTION, including the week ending March 10.

The Reliables

14 Perfect Weeks

Milton Gibbens	Mel Bancroft
Harold Jones	John Rohlf
Don Keeling	

Badges (12 Weeks)

Tom Anderson***	Harold Jones***
Lloyd Bennett***	Don Keeling***
Paul Blaskovich***	Mel Bancroft***
Clayborn Denny***	John Rohlf***
Milton Gibbens***	

Placards (8 Weeks)

Bob Green**	Bill Stewart**
Herb Lundy**	Don Watkins**
Arie Pack**	Don Wilhite**
Ercell Pullen**	Fuller Mortimer**

Stars

Earl Hamilton*	Marvin Wilkinson*
Joe Kelly*	Jack Woods*
George Porter*	Donald Dickey*
Darrold Selby*	Ted Storck*

Driver Showcase

Jim Seiberling  
Chuck Fisher

The Trailblazers

134

14 Perfect Weeks

Jim Padgett

Badges (12 Weeks)

Shirley Baird\*\*\* Rogene Robertson\*\*\*  
George Henderson\*\*\* Jim Padgett\*\*\*

Placards (8 Weeks)

Terry Green\*\*  
Larry Haltom\*\*  
Ralph Gruver\*\*

Driver Showcase

Cindy Albert Rick Grylls  
Karen Betts Judy Nicholls  
Sherry Bruce Jesse Williams

Stars

Larry Badger\*  
Tim Reames\*  
Mike Walden\*  
Ted Ramsey\*

The Wheels

14 Perfect Weeks

Robert Blount  
Larry Clark  
Luella Floden

Badges (12 Weeks)

Robert Blount\*\*\*  
Larry Clark\*\*\*  
Luella Floden\*\*\*

Placards (8 Weeks)

Frank Ayres\*\*  
Terry Heller\*\*  
Harry Postal\*\*  
Ken Williams\*\*  
Leo Dagle\*\*

Driver Showcase

Janice Collier Patricia Aaron  
Barb Moren Becky Skalsky  
Carolyn Rife  
Kathy Reeves

Stars

Carolyn Lovelace\* Sherri Starman\*  
Linda Isley\* Jeff Vincent\*  
Glenn Mondt\* John Warner\*  
Connie Perry\* Marlys Wimber\*  
Harry Stanley\*

Practice perfect attendance and GO FOR GREEN!!!

# TRANSACTION

135



THE TRANSPORTATION NEWSLETTER OF THE

S PUBLIC SCHOOLS

MAY 1981

## REMINDER - Medical Exams for 1981-82 School Year

Drivers who wish to take advantage of Health Services' offer to perform our annual state-required physicals should note:

Date: Friday - June 5, 1981  
Time: 8:00 a.m. - 10:00 a.m.

12:00 - 4:00 p.m.

Place: King School

Tests: \*Hearing

Heart & Lung check

Vision

Blood Pressure

a) Color check

b) Field of vision

Urinalysis

Height - Weight

Tine (Tuberculosis)

Pulse

Temperature

This special service is a no-cost benefit to each transportation employee.

\* must be completed by 3:00 p.m.

## IMPORTANT NOTE:

Anyone not taking advantage of the above opportunity should note that all information required to obtain a Bus Driver's Permit for the 1981-82 school year will need to be submitted to JOE ANDERSON not later than Friday, August 14, 1981.

Persons who are full-time and have 90/10 coverage should be certain to wait one year from the date of their last physical examination as Blue Cross/Blue Shield pays for only one examination each year.

MARK YOUR CALENDARS PLEASE . . .

Class 1 drivers - who have successfully completed the 29-hour DPI course will return MONDAY, AUGUST 24, 1981 at 8:00 a.m. in the BRODY JUNIOR HIGH AUDITORIUM.

Class 1 drivers - who have not yet taken or successfully completed the 29-hour DPI course will report at 8:00 a.m. TUESDAY, AUGUST 18, 1981. The course will be conducted in the HOOVER HIGH SCHOOL CAFETERIA.

Class 2 drivers - who have not yet earned certification will need to check with your Driver Manager. All drivers are expected to earn certification within one year of their hire date.

\* \* \* \* \*

WORDS OF APPRECIATION . . . arrived recently from Marie Cardamone, Lucas principal. "The drivers have been most cooperative and have put much effort into establishing good rapport with the children and our school."

SHERRI STARMAN	JOE CARSON
WALT WALKER	MARK KNUDSEN
MIKE WALDEN	KAREN BETTS
NORM RIVERS	CHUCK FISHER
MARY BURKE	BILL THOMASON

Congratulations to each of you on consistent, caring service.

\* \* \* \* \*

SOMETHING VERY SPECIAL has been added to further enrich the garage office. ROGENE ROBERTSON has crafted a most exquisite school bus replica as part of a ceramic ashtray, and shared it for the enjoyment of others.

\* \* \* \* \*

MANY THANKS to all drivers who volunteered their time for the Special Olympics held on Tuesday, May 12.

\* \* \* \* \*

APPLAUSE . . . APPLAUSE . . . for the fantastic job done by CONNIE MANGRA during recent filming by Floyd Lomica for the simulator training program. Her varied route (all kinds of kids and all kinds of geography) fit perfectly with what Floyd needed. CONNIE's expert skills will help others throughout the state to become more professional drivers.

\* \* \* \* \*

Our first "automatics" just arrived. Initial response has been very positive. JIM McCIAIN is the proud driver of #119 while #120 is not yet assigned.

Since these buses have no "Park", both will be upgraded with a brake lock for added driver convenience and a cushion of safety while we "get used" to them. Just another of the many "better ideas" we learn from our talented mechanics. JACK FOGELSON identified this one for us.

\* \* \* \* \*

ROAD-E-O - Results are in from the Regional competition. Having our own "course" with which to prepare was of help, but hard work, skill and that "edge" of competition paid rewards to all who competed. Of our seven drivers from Des Moines, we earned 4th, 5th and 6th place. (Newton was tough. They took 1st, 2nd and 3rd).

JEANETTE WOODS earned 4th place and the right to represent us on JUNE 13 in Ankeny for the State Championship. Ask to see the plaque she received for this honor. Well deserved, JEANETTE.

LINDA CARICO placed 5th and will be an alternate driver in the event a place is vacated.

"MORT" (FULLER) was our 6th place finisher.

\* \* \* \* \*

1980-81 has been outstanding in many respects. Results of the accident analysis so carefully pursued by Accident Advisory Committee members. LINDA CARICO, VERN DEATON AND MARIE DAVIS show a significant drop in number of accidents through May, 1981. Take a look ...

1978-79	--	70	
1979-80	--	51	
1980-81	--	43	- down 15.7% from 1979-80 down 25.4% from 1978-79

1980-81 has been memorable as it will mark the severe impact of budget reductions and necessitate the permanent elimination of one transportation administrator and a summer lay-off for eight 12-month drivers. Response to these difficult situations has been appropriate, cooperative and appreciated.

\* \* \* \* \*

#### A REAR VIEW . . .

Just a year ago: A phone booth was installed in the garage lounge. We participated for the first time in ROAD-E-O activities. DONNIE SULLIVAN and GEORGE ROBINSON placed 2nd and 5th and advanced to the State Finals.

INPUT/OUTPUT

What would you like to see added to or deleted from future editions of TRANSACTION to help it do a better job?

Your ideas are welcome at any time. Mention them to someone in the office or drop a note in the Suggestion Box.

\*\*\*\*\*

TRANSACTION will be mailed to those who will not be working this summer. We hope it will help us keep in touch and aware of goings-ons.

\*\*\*\*\*

**PICNIC - SATURDAY, MAY 30**

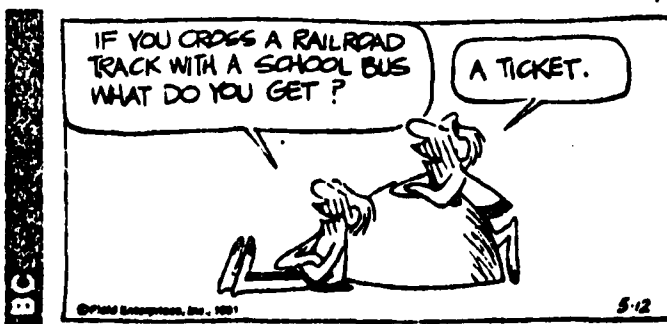
Our Transportation Department picnic is set for Saturday, May 30. LARRY BADGER, Chair of the Picnic Committee reports all is set ... The Raffle is going well, door prizes are literally stacked high and fun times should surely prevail...

\*\*\*\*\*

SEE YOU AT THE PICNIC!!!

D.M. TRIBUNE

5-12-81



The "real green" opportunity is underway and the results of the card drawings should be reported on Monday, June 1. Since there will be only three big winners, all other drivers with perfect attendance during the preceding four weeks will play live games for smaller rewards. Joe is the final authority for determining the winners.

The twenty-week incentive program which began January 5 has been interesting and hopefully rewarding for all involved. I have appreciated the opportunity to meet many of you and I feel I have learned a great deal about the responsibilities and working conditions of drivers in the Transportation Department. One important observation is the loyalty and caring displayed by the majority of drivers when there is a crisis or difficult situation.

I sincerely hope that the attention and frugal incentives have in some way been a tribute to the fine job each of you does for the School District. You are very important people doing an extremely difficult job that is essential for the education of many students in this School District.

Thank you very much for your cooperation and consideration.

Barbara Chaplik  
:

Since this program began, three drivers have demonstrated such "wellness" that they have had perfect attendance.

"The Wheels" - LARRY CLARK has accrued 238 days without an absence or a tardy. LARRY says he need the money, enjoys his job, the kids on the bus and the people he works with. His reliability and punctuality is convincing. He appreciates having good benefits and hopes he never has to use them.

"The Reliables" - JOHN ROHLF also notes needing the money, but likes coming to work everyday because "I like the people I work with and I like the kids that ride my bus." J.R.'s perfect attendance for this 1980-81 year shows that he means what he says.

"The Trailblazers" - JIM PADGETT says he's just like the Maytag repairman - "Dependable." JIM joined our ranks in mid-December and has not missed a day. VERY dependable!!!

---

DRIVER AWARDS SINCE LAST TRANSACTION

100

WHEELS

Picture in Hall of Fame (4 weeks)

Teresa Fulton

Bus Placard (8 weeks)

Connie Mangra \*\*

Glenn Mondt \*\*

Marlys Wimber \*\*

Team Badge (12 weeks)

Terry Heller \*\*\*

Frank Ayres \*\*

Harry Postal \*\*\*

Marlys Wimber \*\*\*

Leo Dagle \*\*

Key Chain (16 weeks)

Luella Floden \*\*\*

Larry Clark \*\*\*

Name Pin (20 weeks)

Larry Clark \*\*\*\*

Stars (additional 4 weeks)

Madline Green \*

Mark Knudsen \*\*

Dick Lainson \*

Carolyn Lovelace \*\*

Barb Moran \*

Larry Nevilles \*

Marr Genca Ousley \*

Connie Perry \*

Claude Reasoner \*

Norm Rivers \*

Danelle Woodhall \*

Jeff Vincent \*\*

John Warner \*\*

Robert Blount \*\*\*

Richard Collier \*\*

TRAILBLAZERS

Pictures (4 weeks)

Michelle Jones

Placard (8 weeks)

Rick Grylls \*\*

Mike Walden \*\*

Team Badge (12 weeks)

Mike Walden \*\*\*

Key Chain (16 weeks)

Jim Padgett \*\*\*

Name Pin (20 weeks)

Jim Padgett \*\*\*\*

Stars (4 additional weeks)

Robert Ellis \*\*

Terry Green \*\*

Larry Haltom \*\*

Chuck Robbins \*\*\*



RELIABLES

141

Picture (4 weeks)

Linda Smith

Bus Placard (8 weeks)

Joe Kelly \*\*  
Jim Seiberling \*  
Darrold Selby \*\*  
Marv Wilkinson \*\*  
Jack Woods \*\*  
Donald Dickey \*\*

Team Badge (12 weeks)

Joe Kelly \*\*\*  
Herb Lundy \*\*\*  
Ercell Pullen \*\*\*  
Darrold Selby \*\*\*  
Don Watkins \*\*\*  
Don Wilhite \*\*  
Jack Woods \*\*\*  
Fuller Mortimer \*\*

Key Chain (16 weeks)

Mel Bancroft \*\*\*  
John Rohlf \*\*\*  
Don Keeling \*\*\*  
Ercell Pullen \*\*\*

Name Pin (20 weeks)

Mel Bancroft \*\*\*\*  
John Rohlf \*\*\*\*

Stars (4 additional weeks)

Tom Anderson \*\*\*  
Lloyd Bennett \*\*\*  
Robert Fenton \*\*\*  
Milton Gibbons \*\*\*  
Jim McClain \*  
Arie Pack \*\*  
Don Padgett \*\*\*  
George Porter \*\*  
Ted Storck \*\*  
Chuck Fisher \*  
Martin Welch \*\*